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ABSTRACT

In its fifth year of operation, the project served about 2,000 students in the Philadelphia public schools. The three components of the project are: (1) Model A, providing bilingual education from prekindergarten to fifth grade, (2) Model B, parallel in pattern to Model A but serving grades 1-4 and grade 2 at othe schools, and (3) Arriba, designed to serve new arrivals to the mainland, mostly Spanish-dominant, in grades 3 through 12 in nine schools. The report describes the needs of the environment, the objectives and organization of the project and the modifications instituted in the fifth year. Testing and management problems are examined. Materials completed in 1973-74 are listed and a financial analysis is given. Statistical tables and graphs reflecting language and reading performance, self-esteem and readiness of pupils, and parental support, with an evaluation for each section, make up the bulk of the report. A cumulative abstract for the five years shows that the "Let's Be Amigos" program has improved performance of both English- and Spanish-dominant pupils in their mother tongues. Growth has occurred in second languages as well but has not been as rapid as anticipated by program planners. A bibliography is appended. (TL)

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OFFICE OF RESEARCH
AND EVALUATION
THE SCHOOL DISTRICT OF PHILADELPHIA

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TITLE VII BILINGUAL PROJECT

"LET'S BE AMIGOS"

EVALUATION OF THE FIFTH YEAR, 1973-1974

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December 1974

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Executive Summary

The Let's Be Amigos program of Bilingual Education served about 2,000 students in Philadelphia public schools. Three instructional components were operating: Model A, which provided bilingual education to all students from prekindergarten to fifth grade of the Potter Thomas Elementary School; Model B, which provided bilingual elementary education to Spanish-dominant students in two elementary schools; and ARRIBA, which provided instruction geared to Hispanic-port-of-entry to pupils in Grades 3-12 in nine schools. The major findings of the Let's Be Amigos evaluations were the following:

(1) the program was well managed, and received wide support of school personnel and parents.

(2) Students' reading and basic skills competence in their mother tongues has been enhanced by the program.

(3) Students' mastery of their second languages has been uneven--in some groups and skill areas performance has been better than anticipated by planners; in other groups growth has been slower than anticipated.

(4) The program has increased the probability that high-school participants would complete high school.

(5) Program participation enhanced the self-esteem of students.

In addition to these findings the 1973-1974 report explored management issues and testing problems.

Five-Year Cumulative Abstract

The Let's Be Amigos program provided bilingual education to Spanish-dominant children from prekindergarten to twelfth grade in eleven schools. It also provides bilingual instruction to English-dominant pupils at one school. Three instructional models operated--Model A, which worked with all pupils in grades from prekindergarten to five attending Potter Thomas School; Model B, which worked with Spanish-dominant pupils in Grades 1 to 4 at two elementary schools; and ARRIBA, which worked with Spanish-dominant in-migrant groups in Grades 3 through 12.

The findings of the 1973-1974 evaluation are reported in the eleven chapters which follow. The major conclusions drawn by the evaluators are abstracted below.

.Overall process evaluation showed that the program is implemented in a satisfactory manner. Attention needs to be given to the distribution of project-developed curriculum materials, and possible problems of pupil attendance at some schools.

.Principals' reviews of programs operating in their schools showed that they were satisfied. However, they suggested that attention needs to be given to improving supervision of teachers at some sites. Also cited were needs for increasing commercial course offerings in the high schools, increasing the contact of ARRIBA program participants with other students in the school, and developing more concrete screening procedures for ARRIBA participation.

.Survey of Parents confirmed previous findings that there is wide support for Let's Be Amigos among this group.

.A study of self-esteem showed that at the ARRIBA high school level the esteem of Spanish-dominant students was higher than that of similar students in English-as-a-Second-Language programs.

.Evaluation of the micro-objectives of teaching first and second language competencies in the elementary grades showed that a high degree of differentiation based on length of exposure to the program and the ethnic background of students was needed in instruction of the second languages. In the first language area, enrichment through the including of more difficult items was advised.

.Testing of kindergarten pupils in Model A showed that their readiness for first grade was greater than estimated levels of similar pre-program pupils. Comparison of half-day and all-day kindergarten pupils suggested that the all-day group's competence was enhanced by increased and enriched instruction provided in the all-day class.

.Reading testing in the pupils' mother tongues showed clear-cut gains over pre-program levels in all grades of the Model School components, but ambiguous results in elementary classes of ARRIBA. First-, second-, and third-grade Hispanic Model School pupils were superior to rural Puerto Rican norm groups. In fourth and fifth grades of the Model schools pupils were below norm groups but superior to pre-program levels. For the first time, English-dominant pupils (in Model A) were superior to pre-program baselines in all elementary grade levels tested. In ARRIBA, parallel test results were inconsistent from grade level to grade level.

.Testing of students in their second languages showed that all English-dominant students and third-grade Spanish-dominant pupils were able to read their second languages at anticipated levels. Growth of English reading skill of the Spanish-dominant group was less than anticipated. Results of testing a Model B fourth-grade class suggested that pupils may be capable of responding well to a more English-oriented instructional environment than staff has anticipated in its general planning.

.Spanish reading performance in the ARRIBA junior high school component was significantly above pre-program baselines, but not as good as it has been in previous years.

.The ARRIBA senior high school component increased the probability that Hispanic students in the four schools served would graduate.

. Instrument development and test tryouts show progress in developing instrumentation for assessing the rate of older ARRIBA pupils' acquisition of English.

Previous reports have also shown other program outcomes not restudied in 1973-1974:

1. Pupils of Model A had mastered arithmetic and writing skills at or above levels specified on criterion-referent tests.

2. Teachers believed pupils showed more adaptive classroom behavior when classes were in their mother tongues (Model A).

3. Pupils had better grades and behavior ratings than did pre-program pupils (ARRIBA).

4. Criterion-referent tests of specially developed materials in science and social studies showed that review and revision of these materials was necessary.

Conclusion

Overall assessment showed that the Let's Be Amigos program has improved performance of both English- and Spanish-dominant pupils in their mother tongues. Growth has occurred in pupils' second languages as well, but this growth often has not been at as rapid a rate as anticipated by program planners.

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CHAPTER 1. PROGRAM STATUS IN 1973-1974

The Let's Be Amigos program completed its fifth operational year in 1973-1974. During that year the program served a total of 1,975 students, two-thirds of whom were dominant in the Spanish language. The instruction of these pupils was carried out in three distinct educational components, which were supported by programs of curriculum development, staff development, community relations and supervision.

Model A was an educational component at the Potter-Thomas School and its annex. During 1974, it served 1,317 students, 551 who were mainly Spanish-speaking, 222 who were bilingual and 544 who were English-dominant. These students were in prekindergarten, kindergarten and grades one through five. They constituted the entire pupil population in the school. When divided into language-competence groups, roughly equal numbers of students were in the "English-dominant" instructional pattern and the "Spanish-dominant" instructional pattern.

In the Model A component, English-dominant and Spanish-dominant teachers work in teams. The students move between the two teachers for instruction in the two languages. In the prekindergarten, kindergarten and first-grade groups, the instruction was primarily in the pupils' mother tongue, with less than one hour of instruction in the second language. In second and third grades the instructional time in the students' second language was increased, so that by the end of the third grade, the afternoon of the instructional day was in the pupils' second language. The proportion of the day devoted to second language remained at that level through fifth grade. In the course of the instructional day, some joint activities were planned for the two language groups.

Model B. The Model B program was operational at two elementary schools, Ludlow and Miller, where it served 160 pupils. At Ludlow the program served children in grades one to four. At Miller one class, a second grade, was operational. The Model B component paralled the Model A instruction pattern except that there was no English-dominant pupil group served by the program.

ARRIBA. The ARRIBA component was designed to serve new arrivals to the mainland. Of the 497 students served, 411 were dominant in Spanish; the remainder were bilingual. Four hundred twenty-nine of these students were born in Puerto Rico or other Spanish-speaking areas.

In the elementary and junior high school grade levels of this component, students studied four major subjects in Spanish (Spanish as a first language, grade-level-appropriate courses in mathematics, science, and social studies). They also studied English as a second language. At the junior and senior high school levels ESL instruction was to be for double class periods.

In the senior high schools, students had individual rosters permitting them to mix regular English class offerings with the Spanish ones of the ARRIBA component. The high school program included course offerings in Spanish as a first language, science, mathematics and history, including specialized courses (geometry, chemistry, biology, etc.). At all high school sites students also had an opportunity to study English as a second language. At one school, Kensington, course work in typing and clerical practice was offered in Spanish.

Modifications in the instructional program of Let's Be Amigos were instituted in 1973-1974 to reflect the maturation of the program or to respond to demands of the environment of the program. The major changes are cited here.

Upward Cycling of Model A - In 1969-1970 Model A was initiated with classes in prekindergarten, kindergarten and first grade. Each subsequent year, one other grade level was added. In 1973-1974, the addition of the fifth grade was the major change. Because of space problems, only about half the students in the fourth grade in June 1973 were retained in the program. Even so, the fifth-grade classes were held in rented space in a nearby church. According to program supervisory staff, the students retained for the fifth grade were not selected on the basis of their academic performance, but were a cross section of the eligible students. As a result, one class of English-dominant and one class of Spanish-dominant students were formed.

Specialist Teachers in Model A - As all pupils under the administration of the Potter-Thomas School were now a part of Model A, specialist teachers who previously served students not in the bilingual program became available. These specialists provided teacher guidance and some direct pupil instruction in science, reading in Spanish and reading in English.

English-as-a-Second-Language Specialist in Model A - A modification of the "portal class" concept described in the fifth year's proposal was initiated in Model A in order to improve the instruction of students entering the Potter-Thomas School above the first grade. Rather than form intact classes of newcomers, as had been described in the proposal, program staff assessed student competence; if it was necessary they assigned the student to an English- or Spanish-second-language specialist for part or all of the time that his classmates were receiving a regular second-language instruction. The specialist teachers worked with students in small groups. Their instruction emphasized oral/aural competence and, where appropriate, beginning reading in the second language.

Upward Cycling in Model B - As was the case with Model A, the Model B program was to be cycled upward one year at a time. This upward cycling has been effected in one school, Ludlow, albeit with major program modification. The upward cycling pattern was not carried out at a second program site, Miller.

In the Ludlow School, the Model B program provided the Spanish-dominant children with instruction as specified in the proposal up through Grade 3. The program cycled upward to the fourth grade in 1973-1974 as planned, but the instructional pattern was not as originally planned. Due to attrition of the original pool of pupils who had begun the program three years earlier, there was only about one-half class of Spanish-dominant pupils for whom Model B was appropriate. These pupils were assigned to a class containing English-dominant pupils. The students in this mixed class who had come up through the Model B component were provided with reading and oral instruction in Spanish as a first language for about one hour per day by a Spanish-speaking teacher. The rest of the instructional time was in an all-English instructional setting. Program supervisory staff felt that students in the group who had come up through the grades in Model B were capable of success in this instructional environment because Ludlow School is also served by ARRIBA in the fourth grade. Pupils who did not have sufficient English competence for the Model B class could be assigned to ARRIBA.

Miller School failed to provide the class structure consistent with Model B in any grade except second. In first, third and fourth grades, Spanish-dominant students received English as a second language. In second grade, a Spanish-dominant teacher provided instruction consistent with the Model B format, and the school's ESL teacher provided the necessary second-language instruction.

Double Periods of English Instruction in ARRIBA - In response to requests from many parts of the program community (school administrators, parents, Bilingual Advisory Council) the program has provided staff and personnel which permit all ARRIBA component schools to offer two periods (approximately 1½ hours per day, or ten periods per week) of English-second-language instruction. According to supervisors' reports, all ARRIBA schools offered these double sessions of English except the junior high schools. In one school at this level, two grades had only one period per day, and the third grade had eight periods per week (instead of 10). The second junior high school offered all its students about five hours (approximately seven periods) per week of English instruction.

Curriculum Development - Objective 1.5 of the ARRIBA coponent stated that curricular materials would be developed to meet the needs of in-migrant students. Implied, but not explicity stated in the objectives of other components, have been curriculum-development processes which would underlie the instructional processes. During the fiscal year 1973-1974 curriculum writing involved teachers in the program, teachers from outside the program, and teachers on special assignment who worked exclusively in curriculum development. All this work was supervised by the Coordinator of Curriculum Development, who managed offices devoted to the processes.

According to the Coordinator of Curriculum Development the following original materials were completed and released for distribution for the first time during 1973-1974:

.English: Your Second Language

Using a thematic approach, this teacher's manual is designed for instruction in beginning oral English. It was prepared for use in grades five to seven, for speakers of other languages, especially Spanish.

.Mis Primeros pasos a la lectura, Books 1-4

This supplementary material is for use in conjunction with the Laidlaw Series in teaching prereading and reading readiness skills to pupils whose dominant language is Spanish and who are in Grades K-2. It includes a variety of enrichment activities useful in preparing pupils for reading. It continues the series of supplementary materials for the Laidlaw texts released in the past.

.Mi libro de cuentos

This is a book of short stories for Spanish-dominant students in Grades 1-2. It consists of a student workbook, as well as a teacher's manual.

.Vistas puertorriqueñas

This is a student workbook and teacher's guide. It makes use of taped dialogues to help convey the geographical, social, and cultural aspects of the island of Puerto Rico. It is designed for use in high school Spanish-first-language courses.

.Conocimient y confianza en si mismo

This is a social studies unit for first-grade Spanish-dominant children. It focuses on self-identity. It is a translation of a previously produced curriculum guide for English-dominant children.

As was the case in past years, a curriculum-evaluation checklist was developed for use in determining whether materials that were being produced met quality criteria established for the program. Content of this year's checklist is shown in Table 1.1. Ratings shown on the table were made by the program's Coordinator of Curriculum Development.

Table 1.1 Coordinator of Curriculum Development's Review of Five Sets of Materials Completed and Released in 1973-1974.

	Yes	No	Not Applicable
1. Appropriate for intended grade level(s)	5		
2. Appropriate for students' cultural background, interest level, and experiential field	5		
3. Appropriate for students' previous knowledge in the subject matter or field	3		2
4. Specific objectives clearly stated	3	1	1
5. Sequential organization & structure	4		1
6. Observable performance outcomes stated	2	2	1
7. Reasonable variety of learning activities	5		
8. Evaluation procedures included	2	3	
9. Provision for individual rate of learning	4		1
10. Teacher guide, including suggested classroom procedures	3		1
11. Availability of equipment	3		2
12. Aids, materials needed to teach unit, and where obtainable, were specified	5		

As can be seen in the table, the completed materials meet, for the most part, the criteria established for the curriculum-development process. The two areas in which most of the materials fail to meet the criteria were measured by items six and eight. Most materials did not have clearly stated objectives and adequate evaluation procedures. These were the same criteria most frequently unmet last year.

Several other sets of materials were also being developed during 1973-1974, but were not yet completed or released for general distribution. They are to be ready for the Fall '74 classes.

.Roberto Clemente: el hombre, el atleta, el heroe. This material is for high school students whose dominant language is Spanish. It presents the late Puerto Rican baseball star as an outstanding humanitarian and family man, as a natural athlete, and as a hero to millions of baseball fans around the world. A teacher's guide, a student workbook, recordings of Clemente's voice, and pictures are included.

.Ciencia: primer grado. This is a Spanish translation of a curriculum guide for teachers prepared by the School District of Philadelphia. It contains a wide variety of simple scientific experiments that can be performed by first graders and their teachers. The experiments are designed to help them understand basic science concepts in their dominant language.

.Miguel is a supplement to the Laidlaw Basic Reading Series. It was designed for first graders whose dominant language is Spanish. It consists of a teacher's guide and pupil workbooks. It is used for review and enrichment of material previously presented by the main text series.

.Hablemos, niños! Level D. This material in the elementary grades is for students whose dominant language is English and who have mastered the Spanish presented in Levels A, B and C of the series. The approach is completely oral. By means of short, simple, situational dialogues, drills, role-playing, games, and songs, the student develops Spanish competence.

.Estudios sociales: primer grado. This is a Spanish translation of a curriculum guide for teachers prepared by the Social Studies Office of the School District of Philadelphia. Its purpose is to enhance the child's self-identity and self-esteem by means of discussion, games, and short trips which increase his awareness of his social environment.

Monitoring - In previous years, monitoring data reported has been based on records of visits to schools by program supervisors and evaluation staff members. During 1974-1975, increased evaluation resources enabled the evaluators to visit virtually all classrooms two times, once in November and once in February or

March. A total of 100 observations were made, 41 were in Model A, eight in Model B, 43 in the ARRIBA program. Seventy observations were of classes of Spanish-dominant pupils, 18 were of English-dominant pupils, and two were of ethnically mixed groups. In 57 observations, Spanish was the medium of instruction; in 32 English was the medium of instruction. (When numbers of observations do not total 100, it is because the activity observed on some occasions did not lend itself to classification.)

The observations were primarily of regular classroom instruction (92 visits). They showed that the program was generally being implemented in conformity with program management's and the proposal's specifications:

.In 78 of the visits, the teachers were observed to use only the target language of the instructional activity. This was in conformity with program specifications.

.In 76 of the visits, materials were accessable in sufficient quantities, versus ten visits in which they were not. In 87 of the visits, the facilities were at least adequate, compared with four visits in which they were judged to be a problem.

.In all visits where judgment was applicable, instruction was judged to be at a difficulty level appropriate for the students.

.In 91 of the visits pupils' response to the instruction was judged to be adequate or excellent.

.There was the expected mix of instructional formats with the trend toward traditional instruction. In 63 instances classes were working as wholes. In 22 instances they were doing group work and in eight instances students were working individually. In a majority of the observations (61) there was two-way communication between teacher and pupils, or communication among pupils. Basic skills instruction, and skills application and extension were observed with about equal frequency.

The observations suggested two areas in which program management review would be valuable. First, in only nine of the visits were teachers observed using locally developed curriculum materials, despite the high program investment in their development. This suggests that a problem appearing in earlier reports--effective dissemination of program-developed instructional material--may still need attention. Second, there are signs that attendance of pupils may be a problem--in 40 observations less than 75% of the pupils on the teachers' rolls were present. These results suggest that systematic exploration of attendance patterns and their causes may be warrented.

Program Operational Cost - Table 1.2 shows the expenditures from Title VII funds for operating the Let's Be Amigos program during the 1973-1974 school year (excluding evaluation and audit expenditures). The table shows that the cost per pupil has risen slightly over the level of the fourth operational year, but is not so high as that of the third operational year. The increase in cost per pupil is believed to be due to increase in salaries which occurred school-system-wide and to an increased commitment to curriculum development.

Evaluator's Comments

The data gathered in this general process evaluation show that despite some problems, the program continues to be functioning within the guidelines appearing in the proposal. Descrepancies seem to be primarily compromises worked out with schools in order to keep the Model B program operational within the schools it has served. Systematic assessment of attendance patterns needs to be made in order to confirm previous years' findings that it was as good or better in Let's Be Amigos classes than it had been among similar pupil groups before the program began.

Table I.2. Direct Expenditures for the Title VII Program, "Let's Be Amigos": 1973-1974, from Federal Funds, Excluding Evaluation and Audit Expenditures

Component	Teaching Salaries*	Supervision, Administration, Curriculum Development**	Clerical Expenses **	Books, Teaching Materials**	Miscellaneous Expenses and Supplies**
Model A No. of Pupils= 1318	$148,257.	$85,461.85	$30,044.81	$10,093.46	$31,905.31
Model B No. of Pupils= 160	$ 49,058.	$10,204.40	$ 3,587.44	$ 1,205.18	$ 3,809.58
ARRIBA No. of Pupils= 497	$163,309.	$31,888.75	$11,210.75	$ 3,766.21	$11,904.96
Total No. of Pupils= 1975	$360,624.	$127,555.00	$44,843.00	$15,064.85	$47,619.85

* These include salaries of teachers charged against Title VII; others are paid out of local fu

** These expenses are pro-rated on the basis of the number of pupils in each program component.

Direct Expenditures for the Title VII Program, "Let's Be Amigos":
1973-1974, from Federal Funds, Excluding Evaluation and Audit
Expenditures

ing ies*	Supervision, Administration, Curriculum Development**	Clerical Expenses **	Books, Teaching Materials**	Miscellaneous Expenses and Supplies**	Total	Cost per pupil
7.	$85,461.85	$30,044.81	$10,093.46	$31,905.31	$305,762.43	$231.98
8.	$10,204.40	$ 3,587.44	$ 1,205.18	$ 3,809.58	$ 67,864.60	$424.15
9.	$31,888.75	$11,210.75	$ 3,766.21	$11,904.96	$222,079.67	$446.84
4.	$127,555.00	$44,843.00	$15,064.85	$47,619.85	$595,706.70	$301.62

f teachers charged against Title VII; others are paid out of local funds.

rated on the basis of the number of pupils in each program component.

CHAPTER 2. MEETING LOCAL SCHOOL NEEDS

The Let's Be Amigos program provides extensive management, supervision and community-relations resources. As a result, a survey of principals was expected to show that these resources were being used by the program in a manner consistent with the local needs of each school--that supervision was satisfactory and that specially trained teaching personnel were providing the necessary instruction.

To assure that the school and community needs were met, the program director had negotiated with each principal and provided instructional resources consistent with the perceived needs. Supervisory personnel of the program have been assigned to schools so that Models A and B have one full-time supervisor and ARRIBA has one full-time supervisor. English-second-language classes incorporated in ARRIBA, but funded through Title I, were supervised by an ESL specialist. In addition there was a community-relations specialist who served all components by providing programs for schools, attending parents' meetings, and occasionally visiting schools in order to assist when additional supervision was needed. The supervisory personnel also conducted staff-development meetings and assured that teachers had appropriate instructional materials.

Previous Findings

Surveys of the principals of schools served by Let's Be Amigos programs were conducted in the first, second, and third operational years of the program. These surveys showed that the program was operating satisfactorily, and that the Spanish-speaking staff trained through summer institutes was providing satisfactory service. In all previous years' surveys, two problems were raised. One was the need for better curriculum materials; the other was concern over the amount of supervision and types of supervision teachers were receiving. Questions of the latter type were most often raised by principals of the ARRIBA schools.

Evaluation Procedure

This survey was a replication of the data-gathering process used during the previous years, except that principals' ratings of teachers were omitted. Current union agreements forbid unofficial teacher ratings of the type made in the past.

The Principal's Questionnaire asked principals to give their overall impressions of the program and asked for specific information about pupil and parent

reactions to it. The instrument provided opportunity for the responding principal to qualify or comment on the ratings he gave. A copy appeared in the Evaluation of the Second Year (Offenberg, 1972).

The questionnaire was mailed in May to principals in whose school a program component was operational. Telephone follow-ups assured that each principal returned a questionnaire. All were mailed to the project evaluator. The cover letter assured that individual respondents would not be identified in any reports or to other project personnel (unless a specific request for service to their school was made). When one questionnaire was missing the principal completed a second copy. All principals whose school were served by the project were included in the survey. Their ratings were tabulated and percentages computed. Responses to open-ended questions were classified and tabulated.

Findings

All 11 principals of schools with bilingual programs funded through Title VII responded to the questionnaire.

The first question of this instrument asked principals to indicate their overall level of satisfaction with the bilingual program components operating in their schools. The answers were all favorable, with five principals reporting that they were "very satisfied" and six stating they were "somewhat satisfied." No one was either "somewhat dissatisfied" or "very dissatisfied." The opinions expressed by the five principals who added comments, were as follows:

.One Model B program principal would rather have the program begin during the first grade than in the second grade as is presently the case.

.One ARRIBA program principal felt that a screening device for entrance into and exit from this program should be developed. He also felt that ESL and ARRIBA guidelines and curricula should be clearer, and teachers should be made aware of the curriculum materials available for the program.

.One principal expressed satisfaction with the performance of his Spanish-dominant classes, but felt the attitudes held by the English-dominant students toward the Spanish-dominants participating in the program needed to be improved.

.One felt that the program was "inclined toward insularity," with more contact between the program participants and the rest of the school needed.

.One high school principal said that the program was essentially oriented toward the college-bound student. It should be directed toward those going into vocational studies as well.

The second question asked principals about expanding the program in their schools. Four expressed a desire that the program be expanded to reach more students. Seven felt it best that the program remain the same size. No one indicated that the program should be either reduced or eliminated from the school. Comments made were as follows:

.Five principals felt that the program already served all of their children who needed it.

.Three principals felt it should remain the same, due to limitation of space and lack of teacher vacancies which would permit employment of bilingual personnel.

.One principal cited the increasing need for additional personnel who would permit greater diversification of course offerings. However, additional personnel were not necessary in order to reach more students.

Question three asked principals who wished to have the program expanded whether more teachers with the background and the training of the summer institutes would be valuable additions to their staff. All seven principals who asked for program expansion indicated that they would like more teachers with this background. In the comments, three principal points were made: (a) all staff members must be fully bilingual; (b) Spanish-dominant teachers that are presently teaching should be required to better master English; and (c) teachers in the senior and junior high schools were needed as instructors in business education, counseling, mathematics, and science in Spanish.

Question four asked principals to rate the supervision received by teachers at the schools. One principal described the ESL supervision as "good", but the ARRIBA supervision as "poor". The other 10 principals made one rating. Three felt it was "excellent", two felt that it was "good", and five felt that it was "fair".

.Four of the principals felt that while the program was good, the very size of the program tended to make supervision too sporadic, thus limiting its effectiveness.

.Three felt that the program is generally being supervised only by the school and not by the central administration.

.Three felt that there was a lack of continuity and design which needs to be considered when taking into account the total school model.

.One felt that his school, due to the size of the program (Model A), needs a full-time supervisor.

Question five asked principals to suggest areas where the summer institute training of teachers could be improved. Five felt that the training institute did not need any improving. Eight principals had suggestions:

.One principal asked that there be greater emphasis on the organizational patterns, strategies, approaches, and educational attitudes of the teachers.

.Three felt that greater emphasis should be given to the social sciences, science, mathematics, and business courses.

.Three felt that the program should emphasize classroom management and control, school record keeping, forms to be used and how they should be filled.

.One principal asked that there be more emphasis on how the ESL program works.

Question six asked principals to indicate whether there was increased understanding of the program goals for this year (as compared to last year) by parents, students and faculty. Seven felt that there had been gains with the parents' awareness of the program, while three felt no gains had been made. Eight felt that gains had been made by the students and faculty in the program, with only two in disagreement. There was one principal who did not answer this question. The principals' comments were as follows:

.Two felt that the principal's observations of and conferences with teachers improve the program and to reintroduce the goals of the program, thus being quite productive.

.One felt that the English-dominant teachers were not understanding either the goals of the program or the Spanish-dominant teachers who carry it out.

.One principal said there was confusion on the part of some parents about the continuation of formal education in Spanish for their children.

.Another principal felt that a workshop session, opened to all staff members, assisted greatly in increasing knowledge of the program.

Question seven asked principals to note other factors about the program which they wished to bring to the program management's attention. The following is a list of the comments made:

.There is a necessity for more coordination with the roster office. (This would reduce the number of students needing service but not receiving it.)

.A Spanish-speaking counselor or a full-time Spanish-speaking home and school coordinator is needed.

.A good screening device is needed for determining which pupils are to enter the program, and once they are in, when they should leave it.

.More interaction is needed among teachers and administrators so as to share concerns over curriculum, materials and teaching methods.

.There is difficulty in increasing the ESL time for Spanish-dominant students, as a large number of Spanish-dominant teachers are unable to teach English as a second language.

.Increased attention to the development and identification of curriculum materials is needed.

.Staff-development programs are needed. Consultation with teaching personnel should be a part of the planning.

.More high school course offerings should be available to non-college-bound students.

Three principals made favorable comments about the program. One said that the faculty is highly qualified, all are experienced teachers holding or working toward M.A. degrees. One noted that the attendance of bilingual program students is better than that of other students in his school. A third stated that the program is effective in reducing drop-out incidence.

Evaluator's Comments

The survey of principals indicated that the program was functioning well but some points made suggest areas where attention is needed. Supervision of teachers in the classroom was the area in which problems were reported most frequently. This parallels findings of the past, suggesting that this has consistently been of concern to principals. Other suggestions appearing in the principals' data which seem to warrant attention are (a) the desirability of additional course offerings in commercial and applied subjects for non-college-bound high school students, (b) the desirability of increasing contact between ARRIBA program participants and the rest of the school population in those components serving a subgroup of students, (c) the need for developing concrete criteria for selecting ARRIBA students and determining when they can move out of the program into the English language mainstream of their schools. The instrument development described in Chapter 11 is designed to meet this last-stated need.

CHAPTER 3. PARENTAL SUPPORT AND CONCERNS

The Let's Be Amigos program has sought the support of students' parents in fostering the value of bilingual education. The program staff has also attempted to find out the views of parents in order that the program be adapted to meet local needs. The Survey of Parents was conducted in order to show that support exists, and to convey parental concerns to program management. It was expected that the great majority of parents would show a high degree of support for the program, that they would express favorable views of the program and that they would wish their children to continue to participate in it.

In order to develop and keep parental support, contact with parents is maintained in two ways in the Let's Be Amigos program. The official communication channel is the Philadelphia Advisory Committee on Bilingual Education, a group consisting of fifty members--school system staff, parents and community organization representatives. This group meets monthly, conducts school visits, and meets regularly with parent groups. The second form of contact is pupils' and supervisory personnel's participation in school-sponsored activities for parents and in a wide variety of other community organizations. Many of these activities are tied to the citywide celebration of Puerto Rican Week and the Puerto Rican Week Parade. Detailed description of these activities appears on pp. 131-132 of the 1974-1975 Continuation Proposal of the Let's Be Amigos Project.

Previous Findings

Previous surveys of parents' opinions of the Let's Be Amigos program have indicated wide support for the basic program. This level of support was in evidence both in the Second-Year Evaluation (in which the questionnaires were not anonymous) and in the Third-Year Evaluation (in which the questionnaires were anonymous). For example, over 90% of the third-year respondent group indicated that they were satisfied with progress being made by their children and wished them to continue participating in the program. When Model A program respondents were divided into groups based on their linguistic background, it was found that Spanish-dominant parents approved of the program more often than did the English-dominant parents. But even among the English-dominant group, favorable responses were made by over 80% of the parents who returned the questionnaires.

Evaluation Procedure

The survey of parents conducted in 1974 was a replication of the one conducted two years ago, in the program's third operational year. This procedure assured that anonymity of the parents' responses would be preserved.

A questionnaire was prepared in two versions--one English, one Spanish. The items in both were nearly identical, variations being permitted to assure that both versions included idiomatic statements in their respective languages. The questionnaire was designed to tap, in a very simple way, the parents' perceptions of the program and to determine whether they had contact with the project through parent activities. A copy of the questionnaire and accompanying cover letter was appended to the parallel study in the third-year evaluation report (see Offenberg, 1973, pp. 31-37).

In May, each teacher in the program was supplied with enough questionnaires, cover letters, and stamped return envelopes for her pupils. Supervisor follow-up showed that all teachers had distributed the materials to their classes and provided appropriate instructions: parents were to complete the questionnaire, using the language of their preference, and mail it to the program-evaluation staff. The cover letter and the teachers both made it clear that parents were not to identify themselves or their children.

Teachers were asked to see that all pupils who were in attendance during the two or three days following the distribution of the questionnaires received them. However, they were not asked to keep a specific record. It was not, therefore, possible to know exactly how many pupils received questionnaires. The percentage of questionnaires returned, based on the number of pupils on roll in the program, was computed and appears in the Findings section of this report.

Results were tabulated by program and school level (elementary, junior high, senior high school). Numbers and percentages of each of the responses to the questions were tabulated, as was the percentage of the pupil population for whom questionnaires were returned.

Findings

A total of 677 questionnaires were returned (34% of the students served by the program). Tabulation of the responses is shown on Table 3.1.

Language-usage patterns shown by questions one through three were similar to those found in previous surveys. In Model A, although roughly equal numbers of Spanish-dominant and English-dominant pupils are served, over twice as many Spanish-dominant parents responded. The language tabulations of other components confirmed that these programs were serving the expected target group, Spanish-dominant students.

Questions 4 through 8 assessed the amount of information parents have about the bilingual program and their opinion of it. One area of concern in these data is found in Question 4. Twenty-five percent of the responding English-dominant

parents reported that their child was not studying English. Two years ago the survey found a similar but less-strong trend. This raises the question of whether communication with English-dominant parents has really provided them with a clear picture of the Model A program ,which does provide all pupils with instruction in English.

A second point to be noted in these data is that parent satisfaction with pupil progress in English seems less than optimal. Only about two thirds of the parents were aware that their children were getting English instruction, although those who knew that children were getting English believed that their children were making satisfactory progress in that language. In contrast, virtually all parents (95%) were aware of their children's study of Spanish, and more than three quarters of the total felt that their progress was satisfactory.

Despite any qualms about English-language progress, parents' support for the program was high in all subgroups of the program population. Ninety percent or more of the parents indicated that they and their children like and want to continue in the program. The last three forced-choice items on the questionnaire (9, 10 and 11) asked parents to indicate contact with their children's teachers. As can be seen in the table, there was a trend for parents of younger children to have more contact with the school than parents of older, secondary school students. In addition, more English-dominant parents reported that they visited their child's English teacher (74%) than that they visited his Spanish teacher (45%). While there was a tendency for more Spanish-dominant parents to report visiting the teacher who spoke their own tongue than to report visiting the English teacher, differences were much less pronounced.

The last item on the Parents' Questionnaire asked respondents to indicate any concerns which they wished to bring before program management. Three hundred fifty-nine (54%) of the parents indicated no concern. Of those who indicated one, 233 (34%) praised one or more aspects of the program; 47 (7%) suggested improvements, with increased emphasis on English as being the most frequent improvement noted. Six parents (1%) requested that more bilingual personnel be hired and ten (1%) made other miscellaneous comments, such as a request for ESL and SSL instruction in the evening for parents.

Evaluator's Comments

Although caution must be exercised in viewing these data because of the self-selection of the respondents, the results indicate a high level of support for the program. There are only two points raised to which program managers need to attend. Increased attention needs to be paid to English-dominant pupils' parents, in order to assure them that their children are studying their mother tongue. The Program staff needs to deal with parents' feelings that the amount of instruction aimed at pupil competence in the English language needs to be increased.

Table 3.1. Tabulation of the Results of the Survey of Parents by Program

Question	Model A: English Dom. N= 114 N	%	Model A: Spanish Dom. N= 280 N	%	Elementary MODEL B* & ARRIBA* N= 52 N	%	Jr. H.S. ARRIBA N= 81 N	%	Sr. H.S. ARRIBA N= 82 N	%	Program Identif N= N
Language Usage**											
1. At home, I speak to my child:											
Always in Spanish	-	-	159	57	34	65	75	93	64	78	41
Sometimes in Spanish	-	-	121	43	17	33	6	7	18	22	20
Always in English	114	100	-	--	0	0	0	0	0	0	4
2. At home, my child speaks to me:											
Always in Spanish	0	0	128	46	24	46	72	89	54	66	36
Sometimes in Spanish	30	26	142	51	26	5	9	11	28	34	25
Always in English	84	74	2	1	1	2	0	0	0	0	3
3. At home, my child speaks to others in the family:											
Always in Spanish	0	0	89	32	14	27	44	54	33	40	29
Sometimes in Spanish	30	26	173	62	36	69	37	46	48	59	29
Always in English	84	74	8	3	2	4	0	0	1	1	6
Perceptions of School Program											
4. Is your child studying English in school?											
No	25	22	29	10	5	7	10	12	2	2	6
Yes	77	68	245	88	47	90	70	86	80	98	62
If yes, are you satisfied with the progress he is making in English?											
No	9	8	20	7	3	6	6	7	2	2	7
Yes	59	52	189	68	40	77	56	69	57	70	43
No response	9	8	36	13	4	7	8	10	21	26	12

Table 3.1. Tabulation of the Results of the Survey of Parents by Program

	Model A				Elementary MODEL B* & ARRIBA*		Jr. H.S. ARRIBA		Sr. H.S. ARRIBA		Program not Identifiable		Total	
	English Dom.		Spanish Dom.											
	N= 114		N= 280		N= 52		N= 81		N= 82		N= 68		N= 677	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
*														
k to														
nish	-	-	159	57	34	65	75	93	64	78	41	60	373	55
Spanish	-	-	121	43	17	33	6	7	18	22	20	29	182	27
glish	114	100	-	--	0	0	0	0	0	0	4	6	118	17
ld														
nish	0	0	128	46	24	46	72	89	54	66	36	53	314	46
Spanish	30	26	142	51	26	5	9	11	28	34	25	37	260	38
glish	84	74	2	1	1	2	0	0	0	0	3	4	90	13
ld rs														
nish	0	0	89	32	14	27	44	54	33	40	29	43	209	31
Spanish	30	26	173	62	36	69	37	46	48	59	29	43	253	52
glish	84	74	8	3	2	4	0	0	1	1	6	9	101	15
sh														
	25	22	29	10	5	7	10	12	2	2	6	9	77	11
	77	68	245	88	47	90	70	86	80	98	62	91	581	86
u the														
ish?														
	9	8	20	7	3	6	6	7	2	2	7	10	47	7
	59	52	189	68	40	77	56	69	57	70	43	63	444	66
	9	8	36	13	4	7	8	10	21	26	12	18	90	13

Table 3.1. Tabulation of the Results of the Survey of Parents by Program (continue

Question	Model A English Dom. N= 114 %	Model A Spanish Dom. N= 208 %	Elementary MODEL B* & ARRIBA* N= 52 %	Jr. H.S. ARRIBA N= 81 %	Sr. H.S. ARRIBA N= 82 %	Program Identif N=
	N	N	N	N	N	N
5. Is your child studying Spanish in school?						
No	4 4	9 3	2 4	3 4	7 9	4
Yes	108 95	267 95	50 96	78 96	75 91	63
If yes, are you satisfied with the progress he is making in Spanish?						
No	13 11	9 3	0 0	3 4	2 2	5
Yes	83 73	207 74	47 90	68 84	59 72	48
No response	12 11	51 18	3 6	7 8	14 17	10
6. Does your child like learning Spanish and English in school?						
No	10 9	10 4	0 0	1 1	1 1	3
Yes	99 87	263 94	52 100	78 96	80 98	60
7. Do you like your child to be learning Spanish and English?						
No	5 4	9 3	0 0	1 1	1 1	4
Yes	103 90	264 94	52 100	79 98	81 99	60
8. Do you want your child to study two languages next year? (Spanish and English)						
No	7 6	10 4	2 4	4 5	2 2	5
Yes	104 91	265 95	49 94	74 91	78 95	59

Table 3.1. Tabulation of the Results of the Survey of Parents by Program (continued)

	Model A				Elementary MODEL B* & ARRIBA*		Jr. H.S. ARRIBA		Sr. H.S. ARRIBA		Program not Identifiable		Total	
	English Dom.		Spanish Dom.											
	N=	114	N=	208	N=	52	N=	81	N=	82	N=	68	N=	677
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
studying ool?														
	4	4	9	3	2	4	3	4	7	9	4	6	29	4
	108	95	267	95	50	96	78	96	75	91	63	93	641	95
u the														
ish?														
	13	11	9	3	0	0	3	4	2	2	5	7	32	5
	83	73	207	74	47	90	68	84	59	72	48	71	512	76
	12	11	51	18	3	6	7	8	14	17	10	15	97	14
d like sh and ool?														
	10	9	10	4	0	0	1	1	1	1	3	4	25	4
	99	87	263	94	52	100	78	96	80	98	60	88	632	93
ur arning glish?														
	5	4	9	3	0	0	1	1	1	1	4	6	20	3
	103	90	264	94	52	100	79	98	81	99	60	88	639	94
ur child anguages anish														
	7	6	10	4	2	4	4	5	2	2	5	7	30	4
	104	91	265	95	49	94	74	91	78	95	59	87	629	93

Table 3.1. Tabulation of the Results of the Survey of Parents by Program (con

Question	Model A English Dom. N= 114 N	%	Spanish Dom. N= 280 N	%	Elementary MODEL B* & ARRIBA* N= 52 N	%	Jr. H.S. ARRIBA N= 81 N	%	Sr. H.S. ARRIBA N= 81 N	%	Prog Iden N= N
Parent Participation											
9. Have you visited your child's Spanish-speaking teacher this year?											
No	65	57	55	2	11	21	24	30	48	59	26
Yes	45	39	215	77	41	79	56	69	34	41	38
10. Have you visited your child's English speaking teacher this year?											
No	35	30	99	35	16	31	36	44	51	62	32
Yes	74	65	176	63	36	69	43	53	30	37	35
11. Have you ever attended a meeting about your child's school program?											
No	37	32	102	36	20	38	42	52	47	57	37
Yes	73	64	175	63	31	60	37	46	35	43	28

*Percent of Parents answering the question.

**As the Model B and ARRIBA programs serve Port-of-entry pupils, virtually all parents of pupils in this program should report that they always or sometimes speak to their children in Spanish.

Table 3.1. Tabulation of the Results of the Survey of Parents by Program (continued)

	Model A				Elementary MODEL B* & ARRIBA*		Jr. H.S. ARRIBA		Sr. H.S. ARRIBA		Program not Identifiable		Total	
	English Dom.		Spanish Dom.											
	N=	114	N=	280	N=	52	N=	81	N=	81	N=	68	N=	677
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
cipation														
ited Spanish- cher														
	65	57	55	2	11	21	24	30	48	59	26	38	229	34
	45	39	215	77	41	79	56	69	34	41	38	56	429	63
ited king year?														
	35	30	99	35	16	31	36	44	51	62	32	47	269	40
	74	65	176	63	36	69	43	53	30	37	35	51	394	58
r heeting child's ram?														
	37	32	102	36	20	38	42	52	47	57	37	54	285	42
	73	64	175	63	31	60	37	46	35	43	28	41	379	56

f Parents answering the question.
odel B and ARRIBA programs serve Port-of-entry pupils,
y all parents of pupils in this program
report that they always or sometimes
their children in Spanish.

CHAPTER 4. SELF-ESTEEM OF SPANISH-DOMINANT STUDENTS

One major goal of the Let's Be Amigos program is the enhancement of the self-esteem or self-concept of its participants. While this is important for all children, it is especially so for Spanish-dominant children because, as Zirkel (1971) has observed, the self-concept of Puerto Ricans in general is probably lower than that of either black or white students.

The Let's Be Amigos program tried to bring about an increase in self-esteem in the Spanish-dominant pupil group through (a) provision of instruction in the pupils' mother tongue, (b) use of native speakers of the pupils' mother tongue as instructors and (c) emphasis on Puerto Rican and Hispanic culture in the subject matter of instruction and in schoolwide celebrations of holidays. The purpose of this study is to see whether these elements of the bilingual program have, in fact, had the desired effect.

Previous Findings

Related program evaluation was conducted during the first two years of operation of the program (see Offenberg 1972, page 170, and Offenberg, 1970, page 52). In that research, teachers rated pupil behavior on the Devereux Elementary School Behavior Rating Scale (Spivak and Swift, 1967). In part of that research, the comparison was made between ratings made of the same child by his native English-speaking teacher and his native Spanish-speaking teacher. Results showed that there was no relationship between teacher background and pupil background for the maladaptive behaviors rated on the instrument. They also showed that there was an interaction between teacher ethnic background and pupil ethnic background for the adaptive behaviors rated on the instrument--teachers rated pupils of the same background as their own as exhibiting more adaptive behaviors. As Combs (1952) has reported that children seem to incorporate teacher judgments and begin to behave as expected, the wide use of teachers of Hispanic background was expected to provide increased self-esteem of the pupils.

Evaluation Procedure

To determine whether the Let's Be Amigos program has improved the self-esteem of the Spanish-dominant pupils, a two-step evaluation plan was necessary. First an adequate instrument needed to be developed. A Spanish translation of the Coopersmith Self-Esteem Inventory (Coopersmith, 1967) was made and a tryout study conducted during the summer of 1973. Revisions in the Spanish version of the instrument were made on the basis of item analysis of the 1973 data. In order to detect differences in self-esteem, the revised Coopersmith Self-Esteem Inventory in Spanish (CSEI-S) was administered to Let's Be Amigos

students and to English-as-a-Second-Language (ESL) students. The ESL students received special instruction in English for part of the day and were with their English-dominant peers the rest of the day.

The Coopersmith Self-Esteem Inventory was selected because it has been widely used to measure self-esteem of school children (Campbell, 1965; Zirkel, 1971; Trowbridge, 1970 and 1972; Coopersmith, 1967), and because initial examination of its content suggested that the instrument would be appropriate for students of Puerto Rican and other Hispanic backgrounds. The instrument consists of 50 items measuring esteem and an eight-item "lie" scale. The self-esteem items on the instrument measure four areas--General Self (26 items), Social-Peers (8 items), Home-Parent (8 items) and School-Academic (8 items).

A Spanish translation of the instrument was prepared by a member of the research staff in consultation with the project director. During the summer of 1973, this Spanish version was tried with 30 Spanish-dominant pupils from 5th to 10th grades who were in a voluntary summer program operated by the Philadelphia schools. Item analysis carried out on the results of this testing led to the revision of selected items and preparation of a second Spanish version of the instrument. This second version, shown appended to this chapter, was used to conduct the evaluation of the program.

A sample of 166 Spanish-dominant students was selected at random from all classes of 4th through 12th grades served by Model A and ARRIBA components of the Let's Be Amigos program. A second sample of 100 students enrolled in English-as-a-Second-Language classes in the same grades in seven schools served as control groups. To be part of this study, the pupil had to be present on the day when the instrument was administered. Table 4.1 shows the distribution of subjects by grade.

A bilingual native Spanish-speaking member of the program-evaluation staff administered the CSEI-S to students in groups. To minimize the effects of reading competence in Spanish, the directions and items were read aloud. The student groups responded to each item as it was read.

Item analyses were made for both the preliminary and final versions of the instrument using ITEMA, a computer program which produced point-biserial correlations of the items with the total scores, Kuder-Richardson Formula 20 reliability coefficients, and the mean total score of groups who answered each question in the high-esteem and low-esteem directions. These item analyses were made for the composite score and each of the subscales. Because some of the subscales were very short (8 items) their reliability, even on the final version, was not high. For this reason, final analysis was based on only the composite score and the lie scale. When it appeared that there might be a

relationship between the lie scale and the self-esteem-measuring composite score, analysis of covariance was used with the lie scale serving as covariate. This minimized the possibility that lying could account for any observed differences.

Findings

Development of the Revised Spanish Version of the Instrument

Table 4.2 shows the characteristics of the revised Spanish version of the Coopersmith Self-Esteem Scale. The overall composite score had good reliability. Item-by-item correlations with total score showed that the items were generally working as expected. This suggested that the composite measure of self-esteem would be useful for measuring any effects the program might have. Examination of the four subtest analyses (General Self, Social-Peers, Home-Parent and School-Academic) shows that only one, General Self, had any reasonable level of reliability. The lie scale, not part of the composite score, also had low reliability. Based on these results, it appeared that there was little to gain from assessing components of self-esteem on any basis other than the composite score. It was noted, however, that the mean score of the lie scale was quite high (5.39 out of a possible 8). In initial examination of the data it appeared that there was a relationship between the lie-scale score and program participation. According to an evaluation-staff member who is a Latin American, the high lie scores might reflect differences in implicative meaning of language and differences in culture. These differences might result in high lie scores for students with high self-esteem. However, to be conservative, it was decided that the high lie-scale scores would not be ignored. Rather, they would be used as a covariate. Through use of this covariate, the probability was increased that systematic differences in lying would not be mistaken for self-esteem differences between the bilingual program group and the ESL control group.

Program Effects

Analysis of the results of the administration of the SCEI-S to the ESL and bilingual program students is shown in Table 4.3. This analysis shows that there were statistically significant differences between the programs and between grade levels and a significant interaction between these two variables. Figure 4.1 shows graphically the adjusted means obtained in the covariance for pupil groups when divided on the basis of these variables.

As shown on the graph, at the elementary and junior high school levels, pupil self-esteem is virtually the same. In contrast, there is a strong difference between the two groups at the senior high school level. Here the bilingual program group clearly shows a higher level of self-esteem than the ESL group.

This suggests that the major impact of bilingual education on self-esteem is in senior high school.

Evaluator's Comments

These results must be approached with caution because there was no possibility of random assignment of students to programs. Bearing this caution in mind, it appears that there is real impact of the bilingual programs on high-school-age students' self-esteem. Therefore, a program which enables the students to have contact with teachers and students of their own cultural background in the context of a bilingual program may be especially critical for older students in in-migrant groups.

Table 4.1. Number of Subjects by Grade Level in the Control and Experimental Groups

	GRADE									
Group	4	5	6	7	8	9	10	11	12	Total
Control	10	11	-	13	18	15	12	10	11	100
Experimental (N=166)	28*	31*	15	14	15	15	17	15	16	166

* Include Ss from both Model A and ARRIBA. All other grades are only ARRIBA pupils.

Table 4.2. Characteristics of the Coopersmith Self-Esteem Scale

Revised Spanish Version (N=266, Bilingual and ESL samples combined)

Scale	No. of Items	$\bar{x}$	S.D.	Std. Error of Measurement	Reliability (KR-20)
Composite Self-Esteem	50	37.7	6.74	3.12	.79
General Self	26	16.8	3.70	2.25	.64
Social Self	8	5.2	1.59	1.24	.39
Home-Parent	8	5.3	1.74	1.24	.37
School-Academic	8	5.4	1.19	1.78	.55
Lie Scale	8	5.0	1.72	1.72	.45

Table 4.3. Analysis of Covariance comparing Self-Esteem of Bilingual Program and English-as-a-Second-Language Program Students

Source	df	F	P<
Program (P)	1	7.57	.006
Sex (S)	1	2.26	NS
Grade Level (G)	2	2.99	.052
P X S	1	.08	NS
P X G	2	3.61	.028
S X G	2	1.81	NS
P X S X G	2	1.11	NS
Within cells	253	--	--
Regression	1	1.16	NS

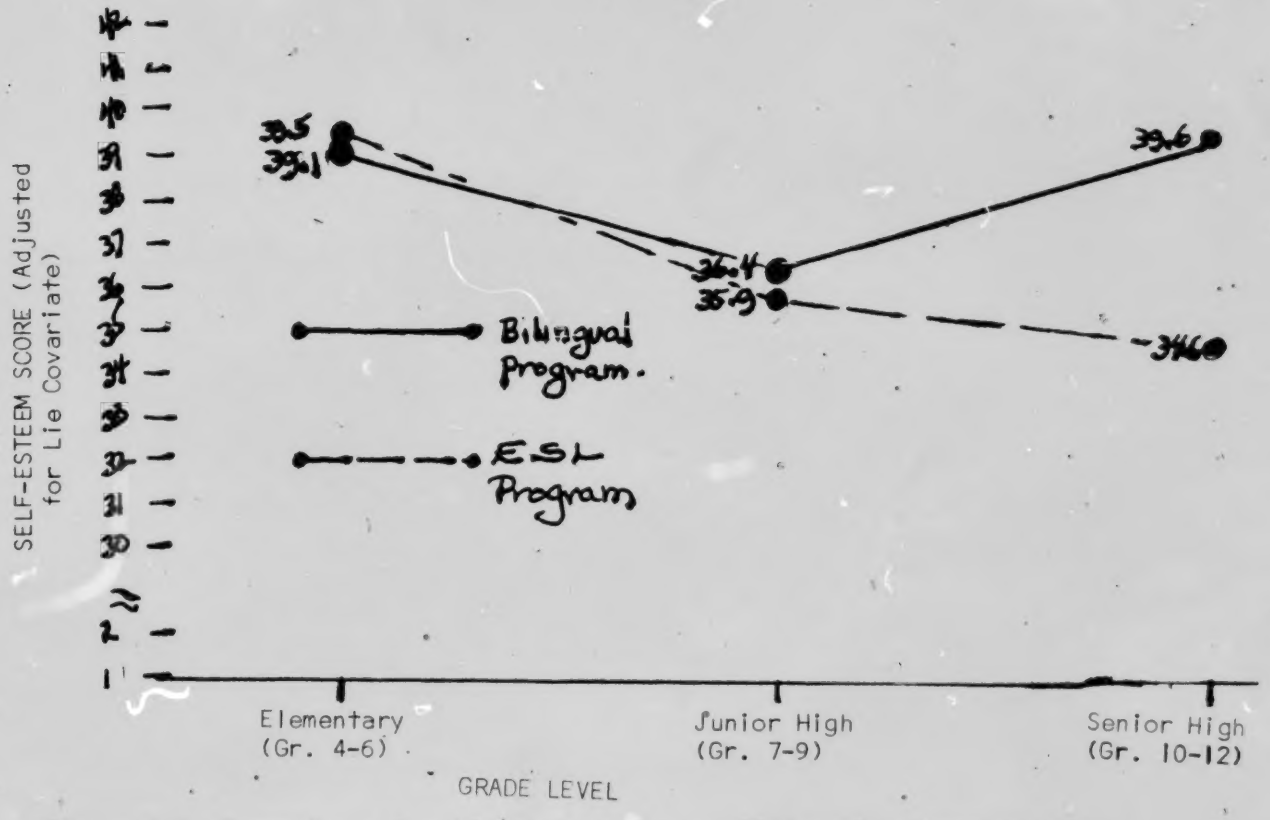

Figure 4.1 Comparison of self-esteem scores of Bilingual program and ESL-only student groups.

Appendix 4.1

Final Version of the Coopersmith Self-Esteem Scale in Spanish

Nombre _____ Escuela _____ Edad _____

Grado _____ Sexo _____ Fecha _____

Por favor, contesta cada pregunta de la siguiente forma:

Si la oración describe la manera cómo generalmente te sientes, pon una marca (✓) en la columna "soy así ".

Si la oración NO describe la manera cómo generalmente te sientes, pon una marca (✓) en la columna "No soy así".

No hay respuestas correctas o incorrectas.

	SOY ASI	NO SOY ASI
Ejemplo: Trabajo mucho.	✓	
1. Paso mucho tiempo soñando despierto.(a)		
2. Tengo bastante confianza en mí mismo.(a)		
3. Frecuentemente desearía ser otra persona.		
4. Soy simpático. (a)		
5. Mis padres y yo nos divertimos mucho estando juntos.		
6. Nada me preocupa.		
7. Para mí es difícil hablar delante de la clase.		
8. Me gustaría ser más joven.		
9. Hay muchas cosas en mí que cambiaría si pudiera.		
10. Puedo decidirme fácilmente.		
11. Soy muy divertido (a) .		
12. En casa, me enojo fácilmente .		
13. Siempre actúo correctamente.		
14. Estoy orgulloso (a) de mi trabajo escolar.		
15. Alguien siempre tiene que decirme lo que debo hacer.		
16. Me toma mucho tiempo acostumbrarme a algo nuevo .		

	SOY ASI	NO SOY ASI
17. Me arrepiento frecuentemente de lo que hago.		
18. Soy popular entre muchachos (as) de mi misma edad.		
19. Generalmente, mis padres tienen en cuenta mis sentimientos.		
20. Nunca soy infeliz .		
21. Estoy trabajando lo mejor que puedo.		
22. Me doy por vencido (a) muy fácilmente.		
23. Generalmente puedo cuidarme a mí mismo (a).		
24. Soy bastante feliz.		
25. Preferiría jugar con niños (as) menores que yo.		
26. Mis padres esperan demasiado de mí.		
27. Me gusta toda la gente que conozco.		
28. Me gusta que el profesor me dirija preguntas en la clase.		
29. Me entiendo a mí mismo (a).		
30. Es bastante difícil ser quien soy.		
31. Todo está confuso en mi vida.		
32. Generalmente, los muchachos (as)siguen mis ideas.		
33. Nadie me hace caso en mi casa.		
34. Nunca me regañan.		
35. No tengo tanto éxito en la escuela como me gustaría.		
36. Puedo decidirme sin cambiar más tarde de opinión.		
37. Verdaderamente no me gusta ser un (a) muchacho (a).		
38. Tengo una baja opinión de mí mismo (a).		
39. No me gusta estar con otra gente.		
40. Frecuentemente he deseado irme de casa.		
41. Nunca soy tímido (a).		
42. En la escuela me enojo con frecuencia.		
43. Frecuentemente me siento avergonzado (a) de mí mismo.		

	SOY ASI	NO SOY ASI
44. No soy tan bien parecido (a) como la mayoría de la gente.		
45. Generalmente digo lo que siento .		
46. Los muchachos me molestan muy frecuentemente.		
47. Mis padres me comprenden.		
48. Siempre digo la verdad .		
49. Mi maestro me hace sentir que no soy suficientemente bueno.		
50. No me importa lo que me pase.		
51. Soy un fracaso.		
52. Me enojo fácilmente cuando me regañan .		
53. La mayor parte de la gente es más simpática que yo.		
54. Generalmente me siento presionada por mis padres.		
55. Siempre sé qué decirle a la gente.		
56. Frecuentemente me desanimo en la escuela .		
57. Generalmente, nada me molesta.		
58. No soy una persona con quien se puede contar.		

CHAPTER 5. EVALUATION OF MICROOBJECTIVES FOR PRIMARY-GRADE FIRST-AND SECOND-LANGUAGE PROGRAMS

Microobjectives for language arts in the prekindergarten, kindergarten, all-day kindergarten, first, second, and third grades were analyzed to provide curriculum planners with clear ideas of appropriate instructional levels. It was expected that this analysis would permit the project planners to differentiate the instructional levels of pupils, based on their language background, grade level, and experience in the program.

Since the inception of the Let's Be Amigos program, instruction in the elementary levels of the Model School components has been guided by logs consisting of microobjectives in various curricular areas. These microobjectives specified the types of oral performance pupils should be able to exhibit if they fulfilled the expectancies of the program planners.

The microobjectives formed the basis of oral performance in language arts, science, social studies and science. Concepts were taught first in the mother tongue, then reviewed or retaught in the pupils' second language.

Previous Findings

Use of microobjectives during the first three years of the program (in grades from prekindergarten to 3) showed that the original conception--parallel lists of microobjectives for English-dominant and Spanish-dominant pupils--was not viable. The two ethnic groups had very different rates of acquisition of the microobjectives, especially in their second language, with Spanish-dominants acquiring English competence more rapidly than English-dominants acquired Spanish competence. Second, there were inconsistencies among the microobjectives themselves--teachers believed that some specified for later grade levels should have been taught earlier in the program, and that others specified for early grade levels should be reserved for later grades. Third, it became apparent that newcomers to the program in levels above first grade could not be expected to receive the same instruction as pupils who had had several prior years of bilingual education. Fourth, it became clear that, at least for some grade levels, the microobjectives in some instructional areas were underestimates of the potential performance of pupils.

To begin to remedy these problems, the 1972-1973 evaluation undertook a revision of the microobjectives. Duplicate microobjectives were eliminated and groups of teachers with special competence in each major curricular area (language arts, number concepts, science concepts and social studies concepts) were asked to order the microobjectives in the area of their expertise, from those which were to be mastered first to those which should be mastered last. They were able to do this task with a high level of interrater agreement. The reordered microobjectives were the instructional base for 1973-1974.

This study concentrates on one of the curricular areas, language arts (first- and second-language skills). Administration of the microobjectives in this curricular area to samples of pupils in grades from prekindergarten to three was used to show the types of change necessary to reduce the four problems already cited.

Evaluation Procedure

In January-February a random sample of pupils was chosen from classes of prekindergarten-to-third-grade children participating in operational Models A and B. These children were tested on the language-arts microobjectives. Multiple regression analysis was then used to describe differences in performance.

A sample of 145 pupils was tested, 16 from Model B classes, the remainder from Model A. These pupils were chosen at random from pupils on class lists prepared in October and November. The pupils ranged from prekindergarten through third grade. Every classroom or teaching team in prekindergarten through third-grade levels was represented by at least one pupil of each of the linguistic backgrounds taught in the class.

A checklist was prepared containing all 79 microobjectives for first language and for second language. The microobjectives appeared in the order specified by teachers last year. In use, the pupils' responses--correct or incorrect-were marked on checklists.

Because of the large number of microobjectives, an efficient method of test administration had to be developed. Since items were in order of increasing difficulty, it was assumed that a student who could perform an item was likely to be able to carry out earlier, simpler items. This enabled the staff to test pupils on every fifth item. When the pupils missed an item, the tester then checked on previous, easier items until he came to a group of five in a row which the student could complete correctly. He then moved on to more difficult items until the pupil missed eleven of fifteen consecutive items. At that point, testing in the language was stopped; the score assigned was the number of the highest item tested, minus the number of incorrect responses.

Pupils were all tested two times, first in their mother tongue, then in their second language. The tests were administered by a research-staff member or program supervisor who was a native speaker of the pupils' mother tongue. The testing was conducted individually, outside the classroom, during February 1974.

Two separate analyses were made, one of all pupils' performances in their mother tongues, the other of all pupils' performances in their second languages.

Stepwise regression analysis was used to analyze first- and second-language data, with the following predictor variables: program (Model A or Model B), number of years in program (one, two, three or more), grade (prekindergarten, kindergarten, all-day kindergarten, first grade, second grade, third grade), mother tongue (English or Spanish), the interaction of years-in-the-program with first language and the interaction of grade with first language. The Statistical Analysis System program package was used for these analyses.

Findings

First Language - Analysis of pupils' performance in their first language shows that two variables best predicted performance: pupils' first language, and the grade-by-first-language interaction. (It should be noted, however, that grade alone was the best single predictor.) The optimal regression equation based on these variables predicted 48% of the total variance. The F ratio for regression was 64.6 ($df = 2/142$, $p<.001$). The F ratio for first language was 87.7 ($df = 1/142$, $p<.001$). The F ratio for the interaction between grade and first language was 41.5 ($df = 1/142$, $p<.001$).

Figure 5.1 shows the level of English- and Spanish-dominant pupils' performance in each of their first languages showing its relationship to grade level. English-dominant students always perform somewhat better in English than do their Spanish-dominant counterparts in Spanish. The significant interaction came from the fact that at the lowest grade levels (prekindergarten and kindergarten) there were substantial differences in performance, but these differences became small in the all-day kindergarten class and first through third grades. At these upper grade levels, performance of both groups was within a few items of the test maximum. This indicated that for both English- and Spanish-dominant groups, the list of microobjectives probably lacked a sufficient number of difficult items for upper grade levels.

Second Language - Stepwise regression analysis of pupil performance showed that there was a more complex situation in second language than that observed in first language. The optimal regression model included three variables: years in the program, first language, and the interaction between grade and first language. The regression equation based on these three variables predicted 77% of the total variance. The F ratio for reqression was 161.0 ($df = 3/144$, $p<.001$). The F ratio for the interaction between grade and first language was 389.5 ($df = 1/144$, $p<.001$). The F ratio for first language was 84.3 ($df = 1/144$, $p<.001$). The F ratio for years in the program was 9.3 ($df = 1/144$, $p<.01$).

These results show that second-language performance of pupils depended on whether their first language was English or Spanish, how long they had been in

the bilingual program and their grade level. Figure 5.2 shows the performance of the English-dominant group. English-dominant pupils' performance never approached the instrument maximum. Students who have been in the bilingual program for one or more years show continuous growth from one grade level to the next, with a peak in the all-day kindergarten, where selection resulted in a class of talented pupils. In contrast, English-dominant pupils who were enrolled in the program for the first time have a low level of performance (less than six items correct) regardless of their grade level.

The pattern of Spanish-dominant children, shown in Table 5.3, is quite different. Pupil performance overall grew from about 26 items correct in pre-kindergarten to 72 items by the second grade. Separate examination of the trends for new pupils and for those who have been in the program for several years showed a steep growth curve for Spanish-dominant children new to the program, and a flatter growth curve for children with program experience.

Evaluator's Comments

Results of this study suggest that goals for oral language-arts performance in the Model School programs need to be revised and articulated to take into account background of pupils.

In the first-language area, it is clear that English-dominant pupils can progress through oral-competence skills at a faster rate than can the Spanish-dominant. It is also clear that by the second and third grades, pupils of both language groups have mastered the specified content. This indicated that if instruction to develop oral competence in the mother tongue will be continued in the higher grades studied, enrichment of the content is necessary. This necessity was observed by program supervisors during the testing. As a result, the proposals for 1974-1975 contain an extended list of microobjectives containing more difficult material for pupils in higher grades.

In the second-language area, it is clear that extended participation in the program resulted in performance differences beyond those predictable from grade level and pupils' first language. Examination of the data subgroup by subgroup clearly indicated that English-dominant pupils who enter the programs in later years do not perform differently in their first year of second language from newcomers in earlier grades. Therefore, instruction in Spanish can begin with the same content regardless of the grade level of the newly admitted English-dominant pupil. Among English-dominant pupils, it is also clear that pupils were nowhere near the maximum that the test can measure. In fact, the microobjective list appeared to have items which were difficult enough for instruction of English-dominant pupils beyond the third grade.

In contrast, Spanish-dominant newly admitted pupils and program-experienced pupils had different competencies in different grades. Among pupils who have been in the program for one or more years, it is clear that older pupils in the Spanish-dominant group were performing at close to the highest levels measurable, suggesting that more difficult or enriched objectives would be valuable for this group.

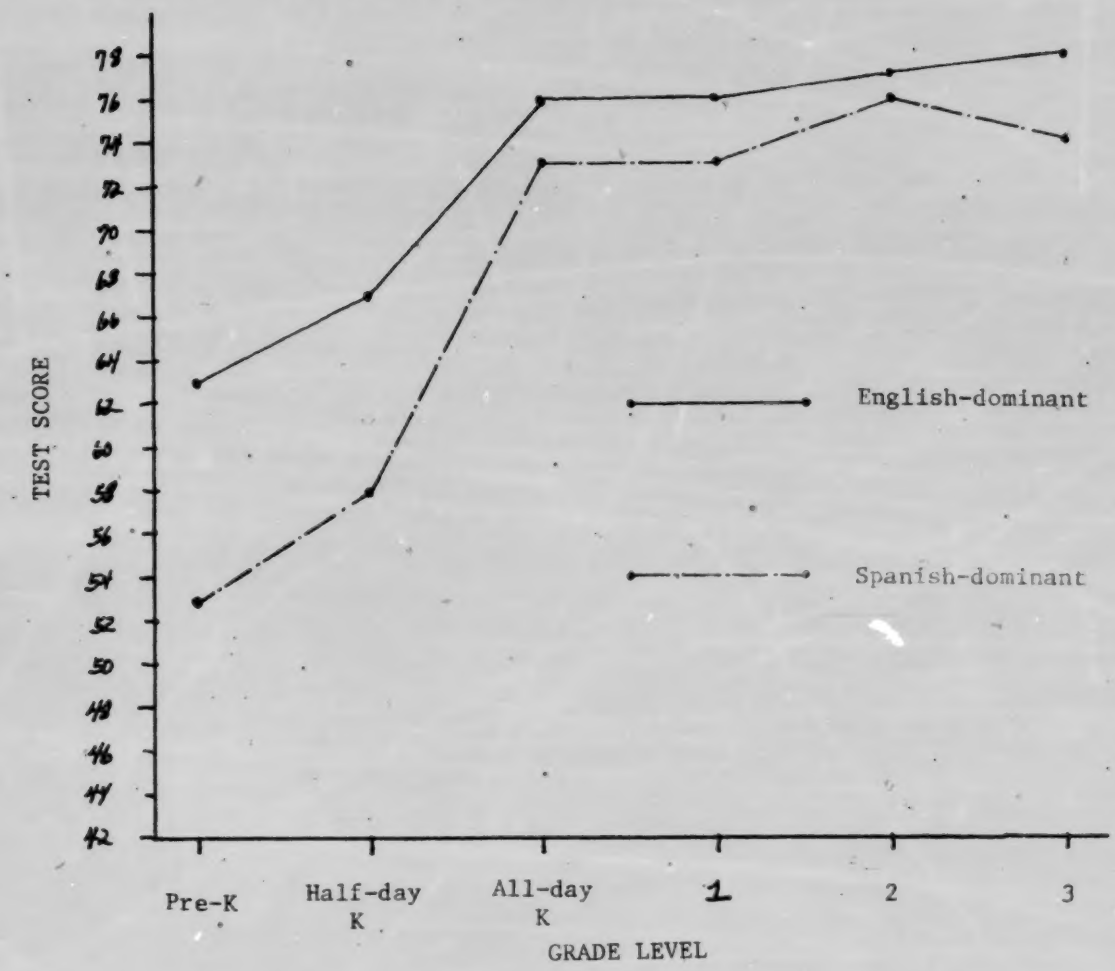

Figure 5.1. Performance of pupils in their first languages.

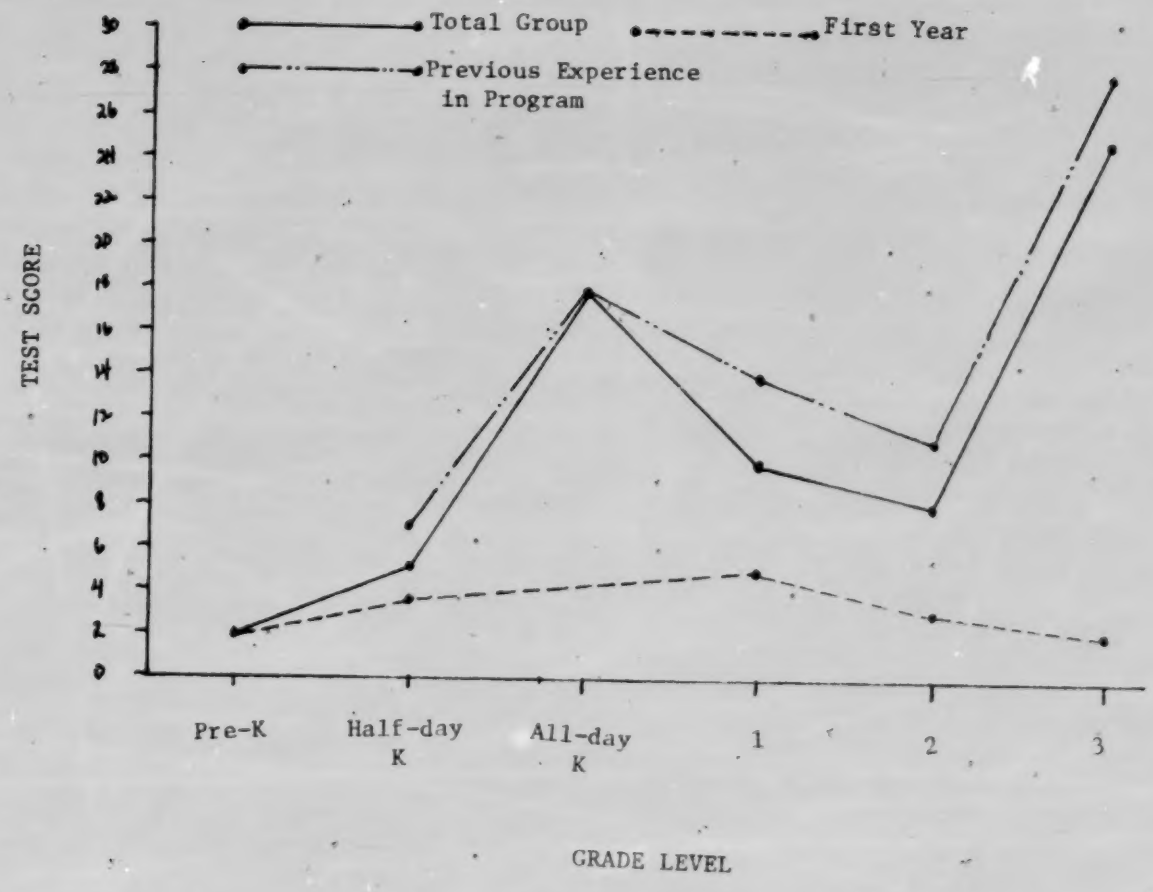

Figure 5.2. Performance of English-dominant children in their second language.

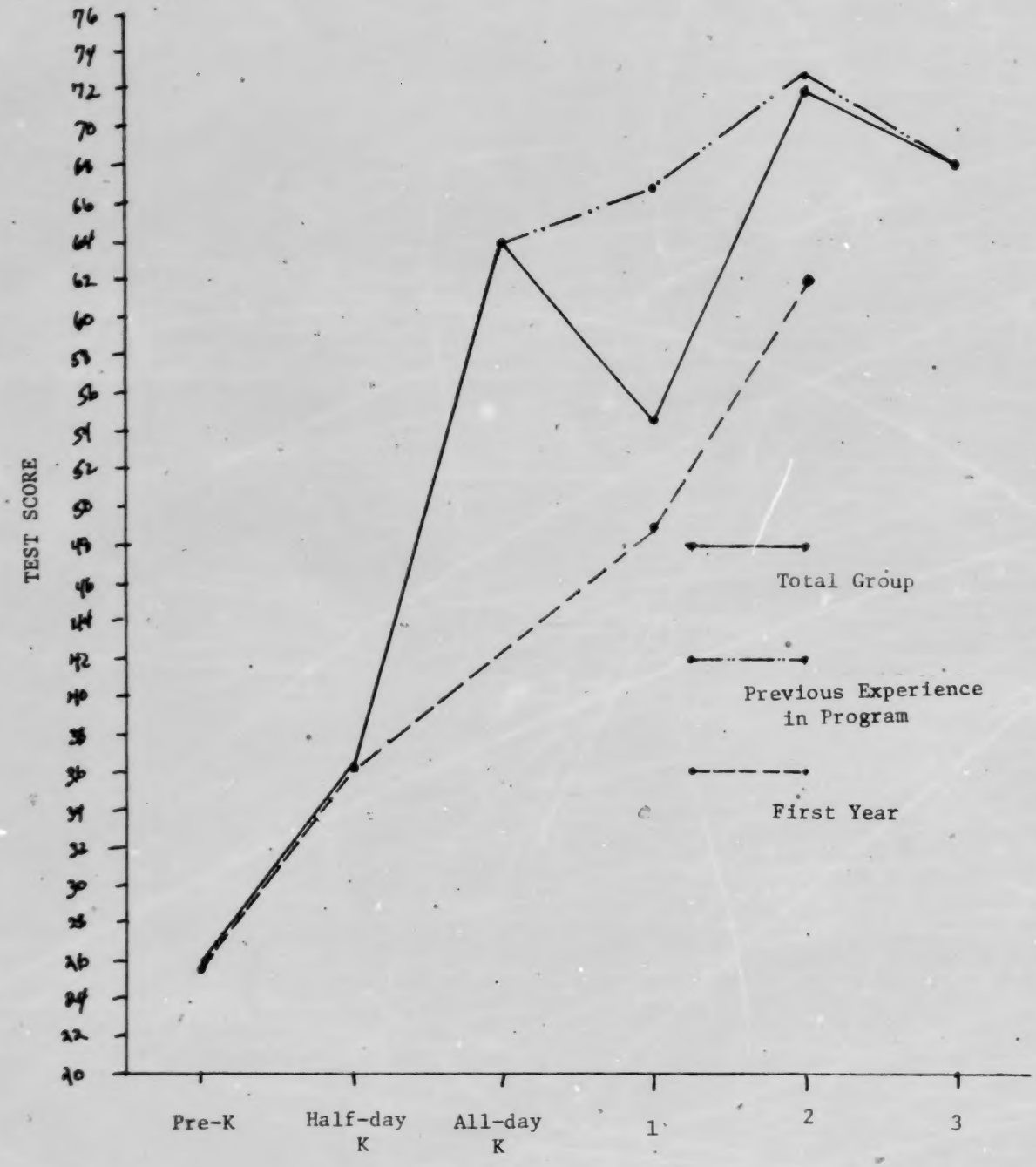

Figure 5.3. Performance of Spanish-dominant children in their second language.

CHAPTER 6. READINESS OF KINDERGARTEN AND PREKINDERGARTEN PUPILS

The prekindergarten and kindergarten of Model A programs were designed to enhance pupils' readiness for first grade. The outcome expected if the program succeeded was that the scores of kindergarten pupils on the Boehm Test of Basic Concepts would be higher than the estimates of scores for pupils citywide and at the Potter-Thomas school before bilingual education was initiated. Subordinate to this question were two problems. The first was determining whether the all-day kindergarten had impact on pupil readiness beyond that obtainable from the regular kindergarten. The second was whether Part I of the Boehm was able to provide descriptive data regarding prekindergarten pupils in order that a good selection be made for next year's all-day kindergarten.

The Model A component at the Potter-Thomas School provided bilingual instruction at the prekindergarten and kindergarten levels. All classes were taught by teams consisting of bilingual teachers--one English-dominant, one Spanish-dominant. During 90% of the instructional time in prekindergarten and kindergarten this instruction was in the pupils' mother tongue. Teachers were provided with microobjective lists, but were not obligated to follow specific instructional procedures. Teachers and supervisors worked out instructional activities which they felt would lead to mastery of concepts which appeared in the lists. The prekindergarten and regular kindergartens met for one-half day.

In addition to these activities, reading in the pupils' mother tongue was introduced in an all-day kindergarten, a program attended primarily by the most able of the previous year's prekindergarten pupils. This all-day kindergarten class met for the full school day.

Previous Findings

During the first years of the Let's Be Amigos program, kindergarten pupils were examined with the Philadelphia Readiness Test, a locally developed instrument which had been used extensively in the schools to measure number and reading readiness. For use in the Let's Be Amigos program, special Spanish instructions were developed. It was found that in three of the project's first four years pupils of both language groups exceeded citywide and earlier Potter-Thomas school performance, and in one year results were close to or above citywide performance although below the performance of the local Potter-Thomas baseline. These baselines were derived from the 1968 testing, the last citywide administration of the test (Offenberg et al. 1973a Study 7 and Offenberg 1973b Study 5).

The prekindergarten pupils have also been tested in the past. The instrument consisted of a selection of items from the Philadelphia Readiness Test and some new material derived from prekindergarten objectives. Spanish and English instructions were prepared for this test. This test was used to rank pupils in terms of their achievement in prekindergarten, so those with the most skill could enter the enriched all-day kindergarten program. During 1972-1973, the first half of the Boehm Test was substituted for this instrument. Teachers and supervisors felt that the Boehm provided better data for this purpose than did the original project-developed test.

One problem with the Philadelphia Readiness Test was that it lacked sufficient range--the typical performance was close to the highest score possible on the tests. This was especially a problem in kindergarten where it prevented assessment of any improvement in skills arising from the all-day kindergarten. To remedy this, in the spring of 1973, use of the Boehm Test of Basic Concepts in the pupils' mother tongues was initiated. Pupils in the Model A kindergarten were tested with this test as well as the Philadelphia Readiness Test. Results showed that English-dominant pupils scored at the 65th percentile--higher than other low-socioeconomic-status children; Spanish-dominant children scored at the same level as other children of this social class (50th percentile).

The all-day kindergarten group was clearly superior to those children who had only half-day regular instruction: English-dominant children in the all-day kindergarten group scored at the 70th percentile, the Spanish-dominant group at the 75th.

The availability of both the Boehm and the Philadelphia Readiness Test scores permitted comparison, and restatement of the original objectives in terms of the new instrument. A correlation of .40 ($df=153, p<.01$) showed a moderate relationship between the two instruments--about as good a relationship as could be expected because of the "topping out" of pupils on the PRT. Reanalysis of these data using the equipercentile method has permitted the development of a graph of equivalent scores. This made restatement of the original objectives in terms of content of the new test possible. Figure 6.1 shows the graph of equivalents obtained.

Evaluation Procedure

The 1973-1974 evaluation used the information gathered last year in order to determine whether the program has produced any achievement gains above estimated pre-program performance levels. The first half of the Boehm test was also administered to the prekindergarten in order to provide data which could supplement teachers' judgments in determining which pupils in the prekindergarten were most ready for an all-day kindergarten experience next year.

The English and Spanish versions of the Boehm Test of Basic Skills were administered in accordance with the test makers' instructions. The version administered was the one in the pupils' dominant language. Kindergarten students took both parts of the test. Prekindergarten pupils took Part I only. The tests were given in small groups of three of four pupils by a member of the program evaluation or supervision staff whose native language was the same as that of the pupils. The tests were given over a period of about six weeks in late April, May and the first days of June. The kindergarten group was usually given the two parts of the test on separate occasions, a day apart. However, if the pupils in the group were alert and told the tester they were willing, the second part was administered a few minutes after the first part had been completed.

All pupils on roll in the Model A prekindergarten and kindergarten were tested except those who had been absent so frequently during the period that the tester could not carry out the complete examination. Of the 87 pupils on roll in the prekindergarten 59 were tested. Of the 214 pupils on roll in the kindergarten 159 were tested.

Boehm test scores were transformed on a pupil-by-pupil basis, into PRT scores using the equipercentile curve of relating the two instruments. The mean of the Boehm-derived PRT-equivalent scores was then obtained and compared with the pre-program baselines. Analysis of covariance was used to determine the effectiveness of the all-day kindergarten in enhancing last year's prekindergarten pupils' performance.

Findings

Kindergarten - The pre-program (1968) baseline PRT scores specified in the objective were 20.1 (entire city) and 20.9 (Potter-Thomas School). Results of the current testing are shown in Table 6.1. For the English-dominant kindergarten group, the mean of the Boehm-derived PRT scores clearly exceeded those of the pre-program groups. For the Spanish-dominant group, the mean of the derived scores was about one point above the Potter-Thomas baseline, suggesting that the objective had been attained for this group as well. In terms of test makers' norms, this means that the English-dominant children were at the 70th percentile of low-socioeconomic-status children. The Spanish-dominant children were slightly below the low-socioeconomic-status norm, at approximately the 47th percentile.

This is less than one raw-score point (one item) different from the 50th percentile. It should be noted, however, that the Spanish version of the Boehm test does not have its own norms. All that the manual states is that in the initial testing, the results are similar to those obtained for the English-dominants. Therefore, the small difference between the Spanish-dominant group and the 50th percentile of the norm group cannot be interpreted with any confidence.

Value of All-Day Kindergarten. Table 6.2 shows the results and the result-analysis of the Boehm testing of pupils in the all-day kindergarten. The average all-day kindergarten pupils' scores were quite high--those of English-dominant pupils in the all-day kindergarten were equivalent to the 90th percentile, those of Spanish-dominants to the 65th percentile (low-socioeconomic-status norms). The degree to which these scores were brought about by participation in the all-day kindergarten is shown by comparing them to scores of children who had prekindergarten experience but were enrolled in the regular kindergarten. Analysis of covariance was used to examine the statistical significance of the difference between these two groups. In this analysis the 1974 Boehm scores were adjusted for the performance shown by these children on Part I of the Boehm at the end of prekindergarten. This analysis shows that, when prekindergarten performance is taken into account, there is still clear-cut superiority of the all-day kindergarten group which probably cannot be attributed to only the selection of more talented pupils for all-day kindergarten. This is evidence that, at least for the pupils with prekindergarten, the all-day kindergarten is a valuable experience.

Prekindergarten Pupils. Results of administration of the Boehm Part I are shown in Table 6.3. Results of this testing are somewhat higher than those obtained last year, when both English-dominant and Spanish-dominant pupils scored between 15 and 16 items correct. As no norms exist for their grade level, it is not possible to interpret those scores except in a "criterion" sense. After examining the content of Boehm Part I, the program supervisors have used these scores in conjunction with classroom-based teacher recommendations to select pupils for the all-day kindergarten program. They felt that the pool of pupils for this program was large enough to warrant the all-day program.

Evaluator's Comments

Results of this research suggest that the bilingual kindergarten program has provided all children with readiness skills greater than those of pre-program levels. It also shows that the English-dominant pupil group has a readiness-skill level beyond that which would be expected of pupils of their socioeconomic status. Spanish-dominant performance was about the same as that of the low-socioeconomic status English-speaking norming group used in development of the instrument.

The finding that the all-day kindergarten has resulted in improved performance has implications for program design. In previous years (see Offenberg 1973a), it has been shown that the all-day kindergarten children developed pre-primer-level reading mastery. This outcome has been reported by teachers again in the fifth year (but not measured). The Boehm data show that in addition to these reading skills, the all-day kindergarten pupils also had a greater mastery of basic concepts than did other kindergartners, even when the selection process is taken into account. Taken together, these findings suggest that experimentation with extension of the all-day kindergarten program to other groups of pupils could be worthc while. If the basic concepts of the most talented and most advanced group can be enhanced through an extended kindergarten instructional day, the additional instruction may also be beneficial to the less talented and less advanced pupils as well.

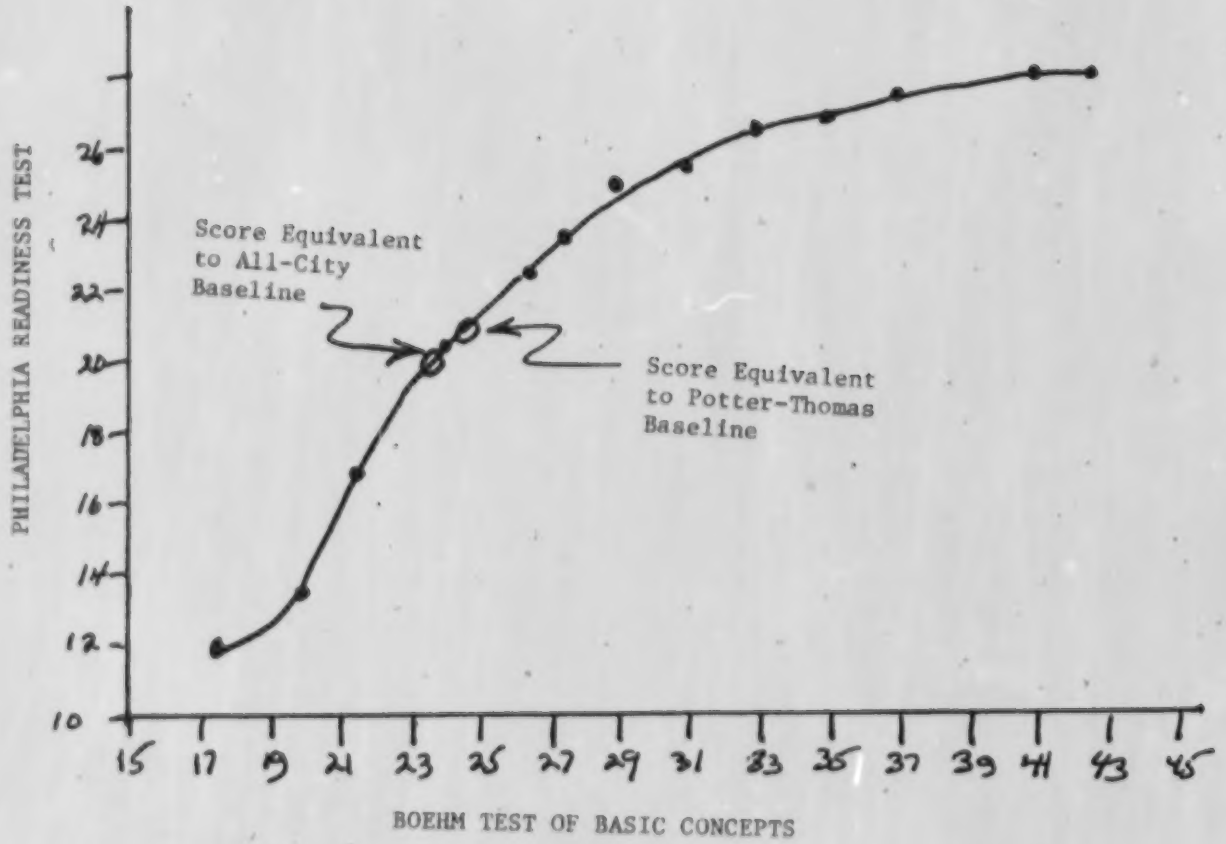

Figure 6.1 Equivalent Boehm and PRT scores as determined by the equipercentile method.

Table 6.1 Results of Testing Kindergarten Pupils on the Boehm Test of Basic Concepts in Their Mother Tongues

Item	Pupil Group	
	English Dominant	Spanish Dominant
Number of Pupils	83	76
Mean Score	32.9	27.4
Standard Deviation	6.7	6.5
Percentile Rank of Mean (Low SES Norms)	70*	47*
Mean PRT Equivalent Score	24.6	21.7
Standard Deviation	3.6	4.8

*From Table 5, Boehm Test Manual, p.18

Table 6.2. (To conserve space, Table 6.2 follows Table 6.3.)

Table 6.3. Prekindergarten Pupil Performance on Boehm Test, Part I

Item	English Dominant	Spanish Dominant
Number Tested	25	34
Mean Score	16.5	18.1
Standard Deviation	5.9	3.9
Percent of Items Correct	66%	72%

Table 6.2. Current Boehm Test Scores of Previous Year's Prekindergarten Pupils Analyzed to Show Impact of All-Day Kindergarten

	Regular Kindergarten	All Day Kindergarten	Total
English-Dominant:			
N	13	15	28
Mean	27.8	38.8	33.7
Adjusted Mean	30.9	37.0	34.2
Spanish-Dominant:			
N	6	18	24
Mean	23.7	31.1	29.3
Adjusted Mean	25.8	29.6	28.6
Total Group:			
N	19	33	52
Mean	26.5	34.6	31.6
Adjusted Mean	29.3	32.9	31.6

Analysis of Covariance

Source	df	F*	p.<
Language	1	16.2	.01
Program	1	6.7	.02
Interaction	1	0.5	NS
Within Groups	47	--	--

*F ratios are corrected for the effect of the 1973 Prekindergarten Boehm Test (Part 1) scores. These scores correlated .60 with the 1974 Kindergarten Boehm testing.

Table 6.3. (To conserve space, Table 6.3 precedes Table 6.2.)

CHAPTER 7. READING AND LANGUAGE PERFORMANCE IN THE ELEMENTARY SCHOOL PROGRAM: STUDENTS' PERFORMANCE IN THEIR MOTHER TONGUES

A major goal of the Let's Be Amigos program is to enhance the reading and language performance of Spanish- and English-dominant children in their mother tongues. To determine whether enhancement of this type has taken place, pupils in the elementary grade-level components of the program (Model A, Grades 2-5; Model B, Grades 2-4) have been tested on instruments used with similar pupils before the program was initiated. The expected outcome was that in Models A and B there would be statistically significant superiority of performance of Let's Be Amigos pupils over the pre-program levels.

In addition to assessment of this goal, Spanish-dominant first-grade students and ARRIBA students were tested in order to obtain an idea of their performance in their mother tongue. There is no baseline for the other first-grade group or for the ARRIBA pupils who were in Grades 4, 5, 6. The lack of a program baseline for the first-grade group existed because these tests were never administered at this level before. It was hoped that first graders would be working at levels approximating the norm of their age group. There was also no clear performance expectancy for the ARRIBA group, because many pupils were new in-migrants whose performance was determined largely by their pre-program experiences.

Each of the three educational components of Let's Be Amigos has its own instructional pattern. In Model A, both English- and Spanish-dominant children use materials designed for use with pupils learning to read their mother tongue. During the first three years of the program, English-dominant students used the Bank Street reading program to learn to read their mother tongue. During the fourth year, Lippincott readers were used with the fourth-grade students. During the fifth year, use of Lippincott materials with English-dominant children at all levels has increased--the Bank Street materials now served a more supplementary role. Spanish-dominant students used the Laidlaw reading series at all grade levels. Some classes also used materials prepared by the Spanish Curriculum Development Center as supplements.

The instruction of reading and language in the pupils' mother tongues was provided by teams consisting of teachers who were native speakers of the two languages. The first-language instruction was provided by the teacher on the team who was the native speaker of that language. When a pupil's instructional level was very different from that of the majority of his classmates, he was often sent to a teacher working with a group at the appropriate level, even though this teacher might not be a part of the team serving the rest of his class.

The Model B program served only Spanish-dominant children. At Ludlow School, these children were in grades one through four. In Miller School, there was a second-grade class operating. In all classes from grades one to three, the instructional content of Model B paralleled that of Spanish-dominant students of Model A, except that materials prepared by the Spanish Curriculum Development Center were more widely used as supplements. In the one fourth-grade class (at Ludlow) the instructional pattern was different. Students who had come through the lower grades of Model B were in a class with English-dominant children. The Spanish-dominant group within this class had Spanish-first-language instruction for one hour daily. The remainder of the instructional day was conducted in English.

As was noted in Chapter 1, the ARRIBA component was designed to serve new in-migrants from Spanish-speaking areas in grade levels above the third. Instruction in mathematics, social studies, science, and Spanish as a first language was provided in the Spanish language. English as a second language was also provided. Because of the diverse backgrounds of the inmigrant group, instruction was geared to the skill levels of the pupils as they came to the program. However, as far as possible, the instruction in subject areas, except language arts, parallels the content of regular English instruction of the grade level. In both the instruction in languages and in other areas, a combination of program-developed and commercial materials was used. In the Spanish reading area, Laidlaw texts were the basis of the instruction.

Evaluation Procedure

The evaluation described in this report is a partial replication and an extension of the evaluation conducted in previous years.

The assessment of standardized test performance of Spanish-dominant children in Grades 2-4 is a replication of the methodology used in previous years. Students were tested on instruments normed in Puerto Rico, and used in a 1968 citywide evaluation of Spanish-dominant students. In addition to this replication, the testing program was cycled upward, to the fifth grade, paralleling the upward cycling of the Model A component. As was the case with Grades 2-4, performance was compared with pre-program results and norms. In addition to this upward cycling, Spanish-dominant first-grade children were tested for the first time. As there is no pre-program baseline for this group, its performance was compared only to the test-publisher's norms.

The testing of English-dominant Model A students was modified, because the citywide standardized testing program was altered. Citywide, the California

Achievement Tests are being substituted for Stanford and Iowa tests used in the past. An equating study for English-dominant students in Potter-Thomas School is part of this substitution process (see Appendix 7.1). To limit the number of tests being administered to any one pupil, the English-dominant testing was confined to the language-arts subtests. These tests were the ones of primary interest to program planners.

As was the case in previous years, the data from the last administration of the English-language norm-referent tests at Potter-Thomas School prior to the upward cycling to the grade level of the bilingual program served as the pre-program baseline. Tables in the "Findings" section of this chapter show the year of the pre-program baseline. Tests for first-language assessment were as follows:

.Second grade, English-dominant pupils: Stanford Achievement Primary II, four subtests, Word Meaning, Paragraph Meaning, Spelling and Word Study Skills.

.Third through fifth grade, English-dominant pupils: Iowa Tests of Basic Skills, Reading, Vocabulary and Language (I-IV) subtests. Levels administered were appropriate for the children's grade level.

.First through third grade, Spanish-dominant pupils: Prueba de Destrezas Basicas en Lectura (Test of Basic Reading Skills).

.Fourth, fifth and sixth grade, Spanish-dominant pupils: Prueba de Lectura (Reading Test).

In Model A, pupils in attendance during the testing period were examined. Because of the complexity of the testing, with first-language, second-language and the citywide tests being administered, it was difficult to arrange makeup testing. When multivariate analysis of variance was used, pupils who were absent for one or more subtests had to be eliminated. As a result of these two factors, the number of scores analyzed was less than the number of students on roll. The number of students on roll and number tested in each component are shown in Table 7.1.

All tests (except those of the pre-program baselines) were administered by classroom teachers in regular classroom settings in May 1974. One of the three members of the program-evaluation staff was present at all testing sessions and monitored the process. Teachers were asked to follow test instructions explicitly.

In conformity with a new citywide policy, meetings were held with teachers prior to administration of the tests. At these meetings teachers were permitted to

look at test samples and were given copies of test instructions. They were encouraged to give their children practice following these instructions (using teacher-made items) and, where appropriate, practice using separate machine-scorable answer sheets.

Where pre-program baselines existed, analysis of variance or multivariate analysis of variance was used. Where no pre-program baseline was available, descriptive statistics were computed. Where appropriate, a correlation was computed between performance and the amount of bilingual instruction.

Findings

Results Spanish-Dominants

Table 7.2 shows performance of first-grade Spanish-dominant students in Model A and Model B on the Prueba de Destrezas Basicas en Lectura. Performance of the students was clearly superior to that of the rural, Puerto Rican norming group (the average was above the 85th percentile for both groups). Examination of the tests shows that the high scores came primarily from very high performance on word- and letter-recognition sections of the test.

Table 7.3 shows the results for second- and third-grade Spanish-dominant students in the Model School programs on this instrument. The analysis of variance shows clear superiority of both Model A and Model B students when compared to the baseline. Orthogonal comparisons showed that in both second- and third-grade pupil performance, the major differences contributing to the statistical significance were between the baseline and the two model programs. In addition, the analysis showed that raw scores of the third-grade children were significantly better than those of the second grade. Examination of the percentile rank of the mean score of each grade and program group showed that pupils' scores were superior to those of the rural Puerto Rican norms in all groups except the Model B third-grade group.

In addition to the Model School groups, 14 ARRIBA third-grade students completed the Prueba de Destrezas. The average score of this group was 93.6 (standard deviation was 18.5). This was equivalent to the 60th percentile in rural Puerto Rico, and was similar to results obtained in Model A.

Table 7.4 shows the results of administration of the fourth- and fifth-grade test, Prueba de Lectura, to Model A students. There were statistically significant differences between baselines and the Model A program at these levels, as well as significant increase in raw score from fourth to fifth grade. Examination of the percentile rank of the mean score shows, however, that at these grade levels, performance was substantially below that of the norming population in Puerto Rico.

Table 7.5 shows the performance of the small fourth-grade Model B group (at Ludlow) and ARRIBA pupils on the Prueba de Lectura. Typical pupil performance of the fourth-grade Model B group was above the pre-program baseline but not as good as that of Model A students.

The results of ARRIBA testing in the upper elementary levels are ambiguous because they are inconsistent from grade level to grade level. In the fourth grade, typical pupils' performance was above that of the pre-program baseline. In the fifth grade it was poorer than the baseline. Testing was not conducted in the program previously in the sixth grade. However, teachers asked that it be administered in their ARRIBA classes. Student performance was at the 36th percentile. This grade level's pre-program 1968 performance was at the eighth percentile.

In order to see whether decline in Model A pupil performance vis-a-vis Puerto Rican norm groups could be attributable to pupil educational experiences in which bilingual, traditional English-language and traditional Spanish-language instruction were mixed, an analysis was undertaken of fifth-grade Model A students. An estimate of the length of English instruction which Spanish-dominant students received before entering the program was made through checking the appearance of pupil names in previous years' program directories and comparing it to the 1973-1974 report of the date of the pupils' arrival on the mainland. The data were felt to be somewhat unreliable, but probably good enough to detect a strong relationship. The correlation between the number of years of traditional English instruction and performance on the Spanish reading test was -.15 (df=20). This correlation was in the range of chance. Because of the procedural problems, it is not known whether this outcome is caused by a lack of clear relationship or by the unreliability of the estimate of the length of all-English instruction.

English Dominants

Performance of second-grade English-dominant students on the Stanford Achievement Test is shown on Table 7.6. Clear-cut, statistically significant differences between the 1970 pre-program baseline and pupils enrolled in 1974 were evident on all four subtests. The strongest difference was in Spelling (8 months of grade equivalent), followed by Word Study Skills and Word Meaning. The smallest gain, three months of grade equivalent, was in Paragraph Meaning.

Iowa test performance of third-, fourth- and fifth-grade students is shown in Table 7.7. At all levels, pupils in the program were scoring better than pre-program groups. Multivariate analysis of variance showed that grade-level differences, program differences and the interaction between the two were statistically significant for all skill areas measured, Vocabulary, Reading and Language.

Comparison of the performance of the 1974 students with the baseline shows gains ranging from one month of grade equivalent (Vocabulary and Language in the fourth grade) to two years (Vocabulary, Grade 5). The interaction significance resulted primarily from the large difference in performance between the fifth-grade groups. The pre-program fifth-grade baseline and the 1974 performance level differed by more than a full year of grade equivalent.

Evaluator's Comments

Spanish-Dominant

The results of the Model A testing of Spanish-dominant children show that this component has produced clear-cut improvement over pre-program baselines, and is, therefore preserving the pupils' literacy in their mother tongue. However, examination of the performance of the children with regard to norming groups shows a strong trend which program management cannot ignore--a trend from clearly superior performance levels at the lower grades to lower-than-norm-group performance in older children. Examination of the tests themselves suggests the reason for this trend. At the earlier grade levels, high performance can be obtained by acquiring discrete, highly teachable skills (such as letter recognition, phonics, comprehension of single words). As the children move upward through the grades the skills necessary for good scores depend less on these discrete skills and more on the students' ability to comprehend written language and to make inferences which demonstrate understanding. As these skills become more important, performance seems to decline. For example, review of the subtests which make up the Prueba de Destrezas Basicas shows that the high level of first-grade performance came about through very high performance in letter matching, word matching and decoding sections. In the third grade, performance in these skill areas remained at high levels, but parallel development of reading comprehension did not take place. At fourth grade, there is a discontinuity in which performance drops from at-or-above the norm to below the level of native Spanish speakers. This appears to be due to a change in test content. In contrast to the earlier tests which include recognition and decoding skills, the test for the fourth and fifth grades focuses on comprehension (Vocabulary, Speed of Comprehension and Level of Comprehension), suggesting that if the program is to provide viable Spanish-language reading skills, additional emphasis in instruction must be placed on understanding the meaning of what is read.

The pattern apparent in the Model A component was replicated in the Model B data, except that in every grade level performance was somewhat poorer than in Model A.

In contrast to these systematic patterns in the Model School programs, results in ARRIBA are ambiguous. In the third grade, performance was similar to that of

the Model School groups; in the fourth and fifth grades it was substantially poorer. In contrast, sixth-grade test results indicate a good level of performance. The low number of pupils in each of these grade levels of ARRIBA, and the great heterogeneity of the population served, suggest that the performance in this program may depend on the specific group of pupils served in a given year in a specific grade level.

English-Dominants

Improved performance was observed in English-dominant students across all grade levels of the Model A for the first time. This highly consistent improvement suggests that the instructional modifications in the teaching of English reading and language arts were probably effective. One caution needs to be observed, however. As the 1974 testing was conducted as part of the equating study, and as teachers had focused on test-taking skills, at least a part of this gain may have depended upon improvement in the way the pupils took the test. Maintenance of the gains in subsequent years' evaluations will clarify whether the English-dominant pupils' improvement was, in fact, a result of the changes in the instructional program.

Table 7.1. Number of Students on Roll and Tested, by Grade Level

Group	On Roll During School Year	Completed All Sub Tests
English-Dominant Students		
Model A.		
Grade 2	106	96
3	105	88
4	108	56
5	42	33
Spanish-Dominant Students		
Model A		
Grade 1	155	103
2	124	78
3	109	83
4	91	46
5	35	22
Model B		
Grade 1	36	18
2	73	39
3	35	24
4	16	9
ARRIBA		
Grade 3	20	14
4	27	15
5	26	15
6	27	16

Table 7.2. Performance of Spanish-Dominant Children in the First-Grade Test de Destrezas Basicas

Item	Model A (Potter-Thomas) N=103	Model B (Ludlow) N=18
Test Mean (Total)	68	58
Percentile Rank of Mean*	95	86
Standard Deviation	20.2	13.4

* End of year, rural zone of Puerto Rico.

Table 7.3.Comparison of Spanish-Dominant Pupils in the Second and Third Grade with Pre-Program Baseline Groups -- Test de Destrezas Basicas En Lectura

Item	Baseline	Model A	Model B
Grade 2			
Mean	57.5	89.3	80.6
Percentile Rank of Mean	35	75	62
Standard Deviation	20.5	16.4	22.2
No. of Cases	266	78	39
Grade 3			
Mean	69.9	93.8	83.2
Percentile Rank of Mean	27	61	45
Standard Deviation	57.9	18.1	22.3
No. of Cases	332	83	24

Analysis of Variance

Source	Mean Square	df	F	p<
Grade	13068.4	1	10.1	.001
Program	53235.6	2	33.4	.001
Interaction	1435.7	1	0.9	NS
Error	1594.47	816		

Planned Orthogonal Comparisons

Models A and B versus Baseline -- within second grade :
F = 35.3 df = 1/816, P < .001

Models A and B Versus Baseline -- within third grade :
F = 13.9, df = 1/816, p < .001

Table 7.4. Comparison of Model A Spanish-Dominant Students in Fourth and Fifth Grades with Pre-Program Baselines on the Puerto Rican Reading Test, Prueba de Lectura

Item	Baseline*	Model A*
Grade 4		
Mean	17.7	26.1
Percentile Rank of Mean**	7	25
Standard Deviation	8.7	16.3
No. of cases	180	46
Grade 5		
Mean	21.1	28.4
Percentile Rank of Mean**	7	18
Standard Deviation	10.4	17.0
No. of cases	192	22

Analysis of Variance

Source	Mean Square	df	F	p
Program	3077.9	1	25.6	.001
Grade	1141.4	1	9.5	.002
Interaction	15.7	1	0.1	NS
Error	119.8	436		

* Baseline is from 1968 citywide testing. Because baseline data were "grouped" in five-point intervals, similar grouping was done prior to analysis of current Model A results.

** Norms are for rural Puerto Rico, end of the year.

Table 7.5 Results of Testing Model B and ARRIBA Students in 4th through 6th Grades on the Prueba de Lectura

Item	Model B*	ARRIBA
Grade 4		
Mean	22.3	20.4
Percentile Rank of Mean	13	10
Std. Deviation	10.0	11.5
No. of Cases	9	15
Grade 5		
Mean		16.4
Percentile Rank of Mean		1
Std. Deviation		12.5
No. of Cases		15
Grade 6		
Mean		45.4
Percentile Rank of Mean		36
Std. Deviation		13.4
No. of Cases		16

*Model B is only operating through grade 4. All pupils in 4th grade are at Ludlow School.

Table 7.6. Performance of English-Dominant Model A Second-Grade Students on the Stanford Achievement Test, Primary Battery II, Compared with 1970 Pre-Program Baseline

Item	Word Meaning	Paragraph Meaning	Spelling	Word Study Skills
Baseline (N=42)				
Mean	6.1	8.6	2.1	16.5
Grade Equivalent of Mean	1.7	1.6	1.5	1.4
Standard Deviation	3.8	6.3	2.1	6.3
Model A (N=96)				
Mean	11.6	15.7	7.0	25.5
Grade Equivalent of Mean	2.1	1.9	2.3	1.9
Standard Deviation	5.8	8.9	6.1	9.4

Multivariate Analysis of Variance

	F	df	P
Multivariate	11.0	4/133	.001
Univariate:			
Word Meaning	34.1	1/136	.001
Para. Meaning	21.5	1/136	.001
Spelling	25.6	1/136	.001
Word Study Skills	31.4	1/136	.001

Table 7.7. Comparison of Model A English-Dominant Pupils' Iowa Test Performance with Pre-Program Baselines

	Baseline			Model A		
	Vocab.	Read.	Lang.	Vocab.	Read.	Lang.
Grade 3 (Base Year is 1971)						
Mean Grade Equiv.	2.3	2.3	2.3	2.6	2.6	2.8
Std.Dev.(Gr.Equiv.)	.59	.61	.51	.72	.91	.66
No. of Cases		89			88	
Grade 4 (Base Year is 1972)						
Mean Grade Equiv.	3.4	3.2	3.4	3.5	3.4	3.5
Std. Dev.(Gr.Equiv.)	1.4	1.1	1.0	1.0	1.0	9.9
No of Cases		74			56	
Grade 5 (Base Year is 1972)						
Mean Grade Equiv.	3.3	3.4	3.4	5.3	4.9	4.1
Std. Dev. (Gr. Equiv.)	1.1	1.0	1.0	1.3	1.3	1.3
No. of Cases		56			33	

Multivariate Analysis of Variance

Source	F	df	p
Grade			
Multivariate	31.3	6/836	.001
Vocabulary	72.8	2/420	.001
Reading	79.3	2/420	.001
Language	68.8	2/420	.001
Program			
Multivariate	11.7	3/418	.001
Vocabulary	32.1	1/420	.001
Reading	25.6	1/420	.001
Language	20.6	1/420	.001
Interaction (Grade and Program)			
Multivariate	10.1	6/836	.001
Vocabulary	23.2	2/420	.001
Reading	14.4	2/420	.001
Language	3.1	2/420	.05

Appendix 7.1. Conversion Tables for Restating First-Language English Reading Objectives in California Achievement Test Terms

At the time that standardized testing of reading and associated skills was introduced into the Model A component of Let's Be Amigos, the School District was using the Stanford Achievement Tests, Primary Battery II (2nd grade) and the Iowa Tests of Basic Skills (3rd through 8 grades) for citywide evaluation. Because good pre-program assessments of pupil competence were available, program objectives were stated in terms of these two instrument packages. Since the second operational year, program assessment has made use of selected subtests of these instrument packages. In subsequent years there was change in citywide assessment, with the California Achievement Test battery coming into use. The data presented in this appendix are designed to permit program objectives for the English-dominant group to be restated in terms of the instruments to be used on a citywide basis.

In order to be able to continue to evaluate the impact of English-dominant students participating in Model A, an equipercentile conversion of selected subtests was made from Iowa test scores to California test scores. The equated subtests were those which, in the opinion of a test-construction specialist, measured the same pupil skills. The equating was done by administering critical subtests of the Stanford Primary Battery II and the Iowa test battery in addition to citywide administration of the California Achievement Test package. This dual administration was conducted as part of a citywide program of test administrations. As originally planned, the tests were to be administered in a counterbalanced design (some students being tested with the California first, some with the previously used tests first) but administrative problems on a citywide basis made it necessary to first administer the California battery to all pupils. Following this administration, pupils in the 2nd through 5th grades completed the Iowa and Stanford tests. The procedures for administering the Stanford and Iowa tests were described in Chapter 7. California Achievement Tests were administered by classroom teachers to their English-dominant pupils. The tests equated were as follows:

. Stanford Achievement Primary Battery II Paragraph Meaning and Spelling tests with Level 1 California Achievement Tests Reading Comprehension and Spelling tests.

. Iowa Tests of Basic Skills Vocabulary, Reading, Spelling and Language-Usage subtests with California Achievement Tests Vocabulary, Reading Comprehension, Spelling, and Usage and Structure subtests. Students took the grade-appropriate level of each of the tests.

The figures which follow show the equipercentile curves. In 1974-1975, objectives will be restated on the basis of score equivalencies derived from these curves. Table 7.1.1 shows the percentile ranks of the mean scores of English Dominant students on each of the subtests of the California

Achievement Tests. As there was no pre-program baseline for the California battery, these scores cannot be put into a context which would confirm the Iowa-based findings that performance of English-dominant students has improved over pre-program levels.

Table 7.1.1. Percentile Ranks of Mean Scores of English-Dominant Students in Model A on California Achievement Tests Used in City Wide Testing

Grade Level	Reading	Mathematiacs	Language	Spelling	Total Battery
1	44	41	38	39	41
2	26	32	24	18	23
3	15	19	16	20	15
4	26	20	29	20	23
5	24	39	34	20	30

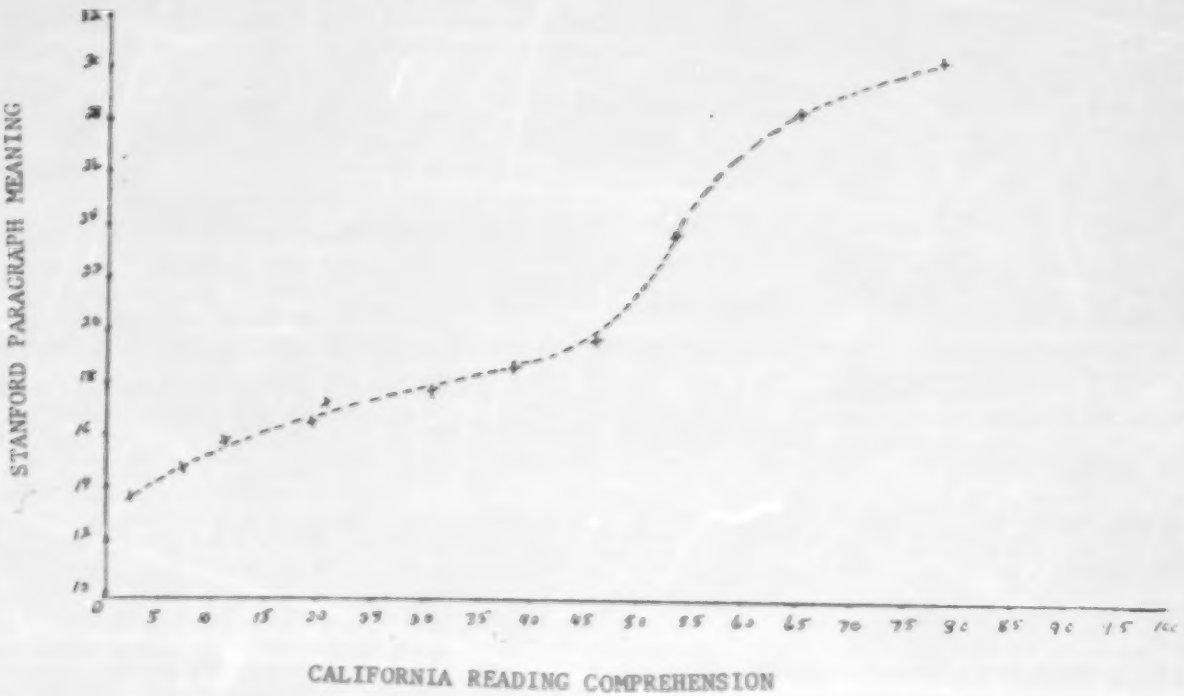

Figure 7.1.1. Conversion of second-grade pupils' Stanford Achievement Test Paragraph Meaning scores into California Reading Comprehension scores. Stanford scores are grade equivalents from Primary Battery II. California Achievement Test scores are raw scores from Level I. Stanford Achievement N=107, California N=105 pupils.

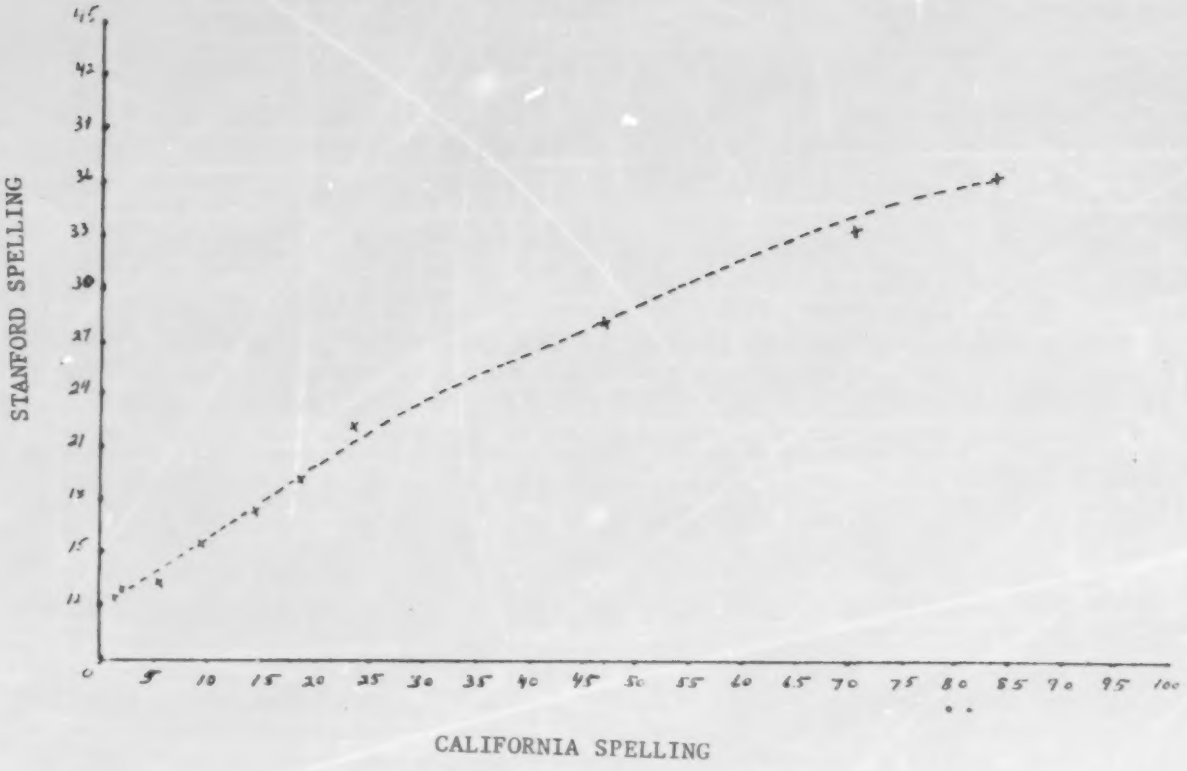

Figure 7.1.2. Conversion of second-grade pupils' Stanford Achievement Test Spelling scores to California Achievement Test Spelling scores. Stanford scores are grade equivalents from Primary Battery II. California Tests are raw scores from Level I. Stanford N=105, California N=102.

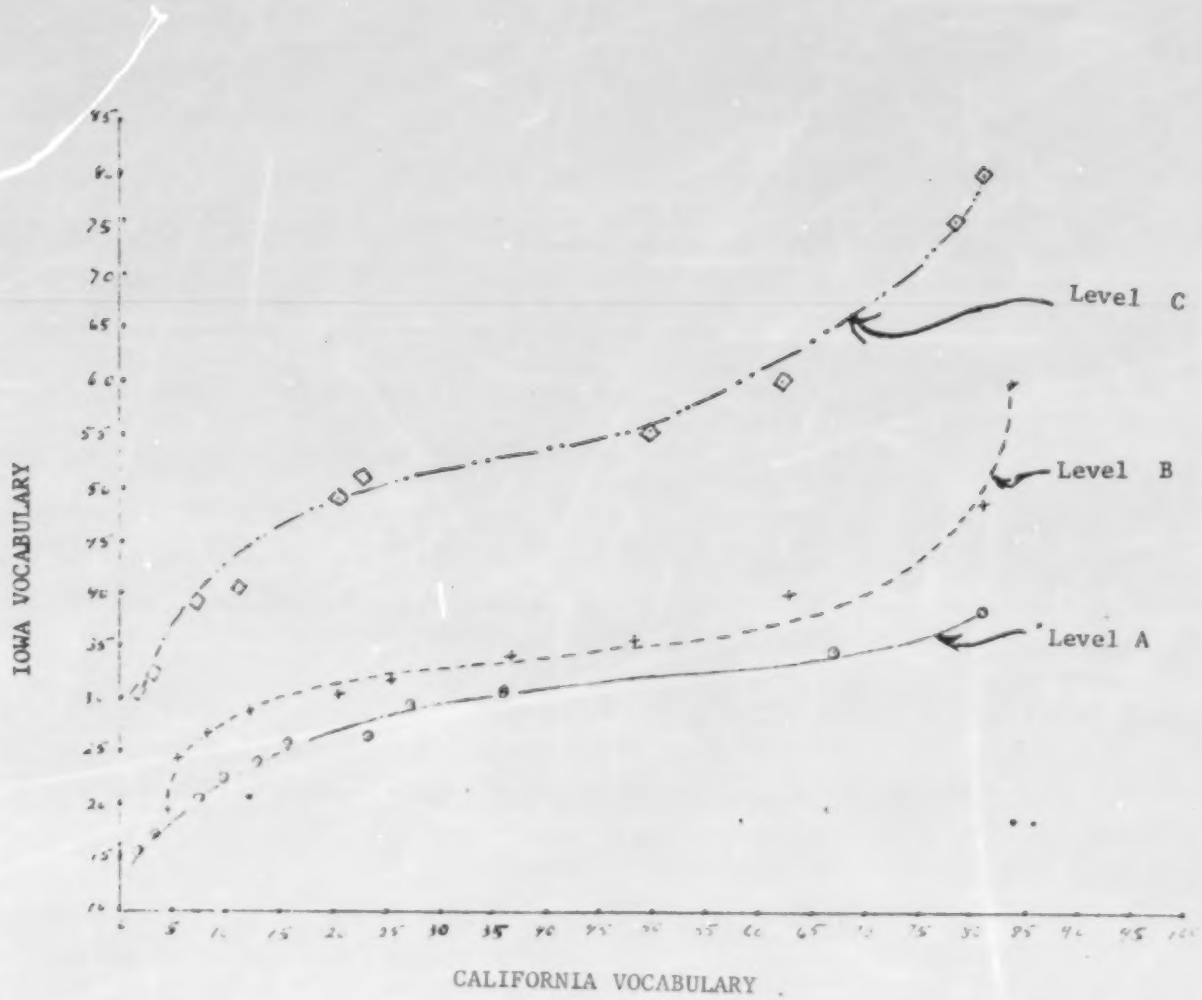

Figure 7.1.3. Conversion of Grade 3, 4, and 5 Iowa Vocabulary scores into California Achievement Test Vocabulary scores. Iowa scores are grade equivalents; California scores are raw scores. Curves match usual levels: Iowa tests are Levels A (3rd grade), B (4th grade), and C (5th grade). The number of students in each level is as follows: Iowa 89 (3rd grade), 95 (4th grade), 50 (5th grade); California 86 (e4d grade), 89 (4th grade), 45 (5th grade).

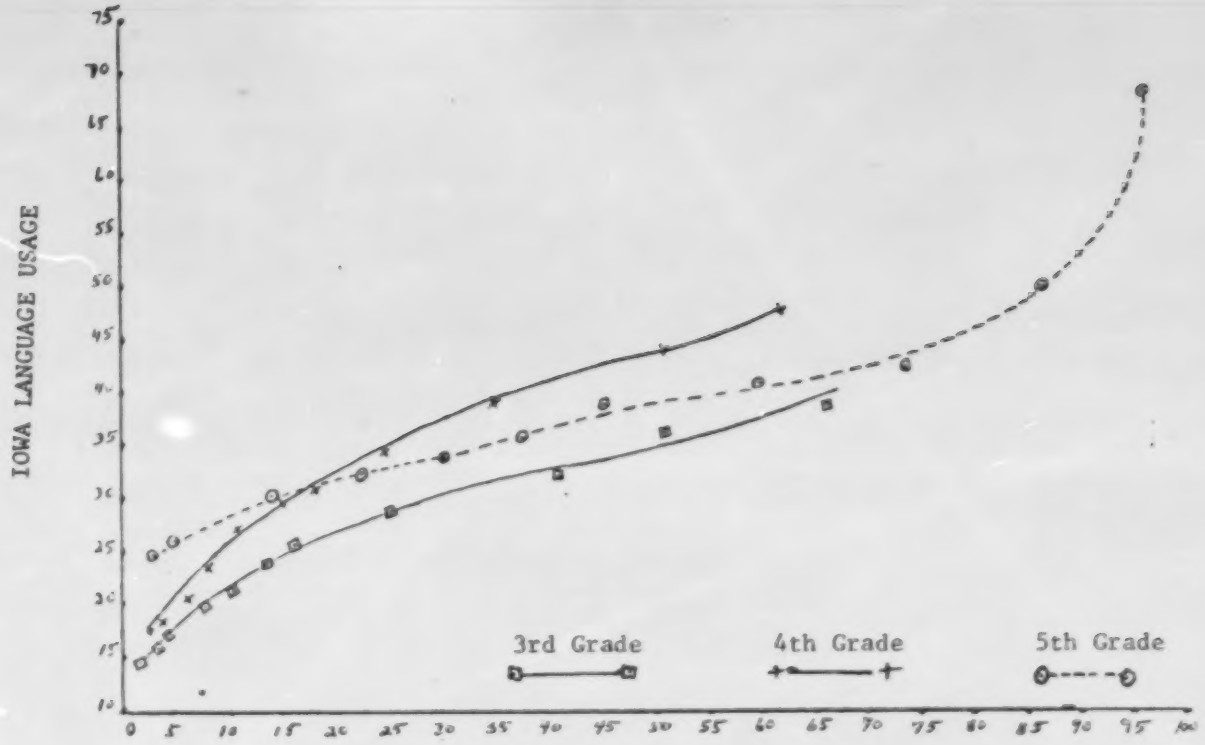

Figure 7.1.4. Conversion of Grade 3, 4, and 5 Iowa Language-Usage grade-equivalent scores to California Achievement Test Usage-and-Structure raw scores. Iowa tests are Levels A (3rd grade), B (4th grade), and C (5th grade). California subtests are Levels 2 (3rd and 4th grades) and 3 (5th grade). The numbers of students in each level are as follows: Iowa 90 (3rd grade), 90 (4th grade), 43 (5th grade); California 80 (3rd grade), 85 (4th grade), 39 (5th grade).

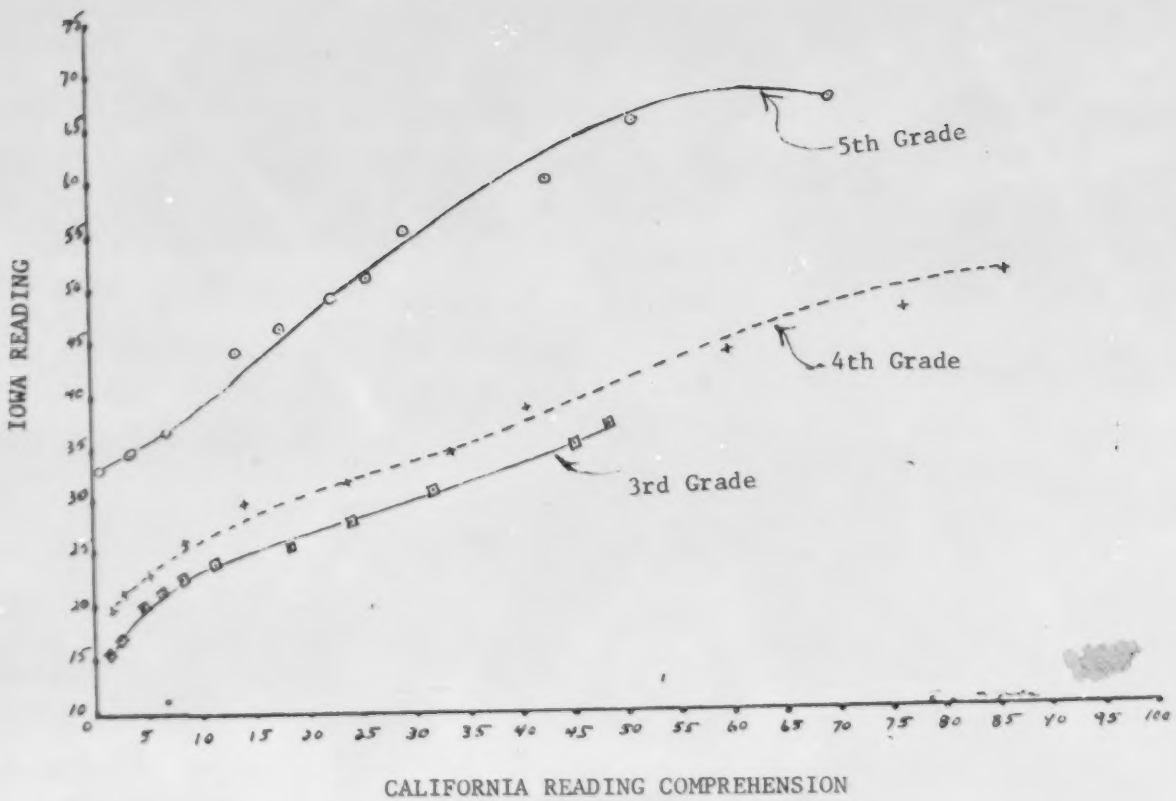

Figure 7.1.5. Conversion of Iowa Reading grade equivalent scores of 3rd, 4th, and 5th grades into California Achievement Test Reading Comprehension raw scores. Levels of each group are those indicated for Figure 7.1.4. The number of students in each level are as follows: Iowa 90 (3rd grade), 95 (4th grade), 50 (5th grade); California 88 (3rd grade), 88 (4th grade) 46 (5th grade).

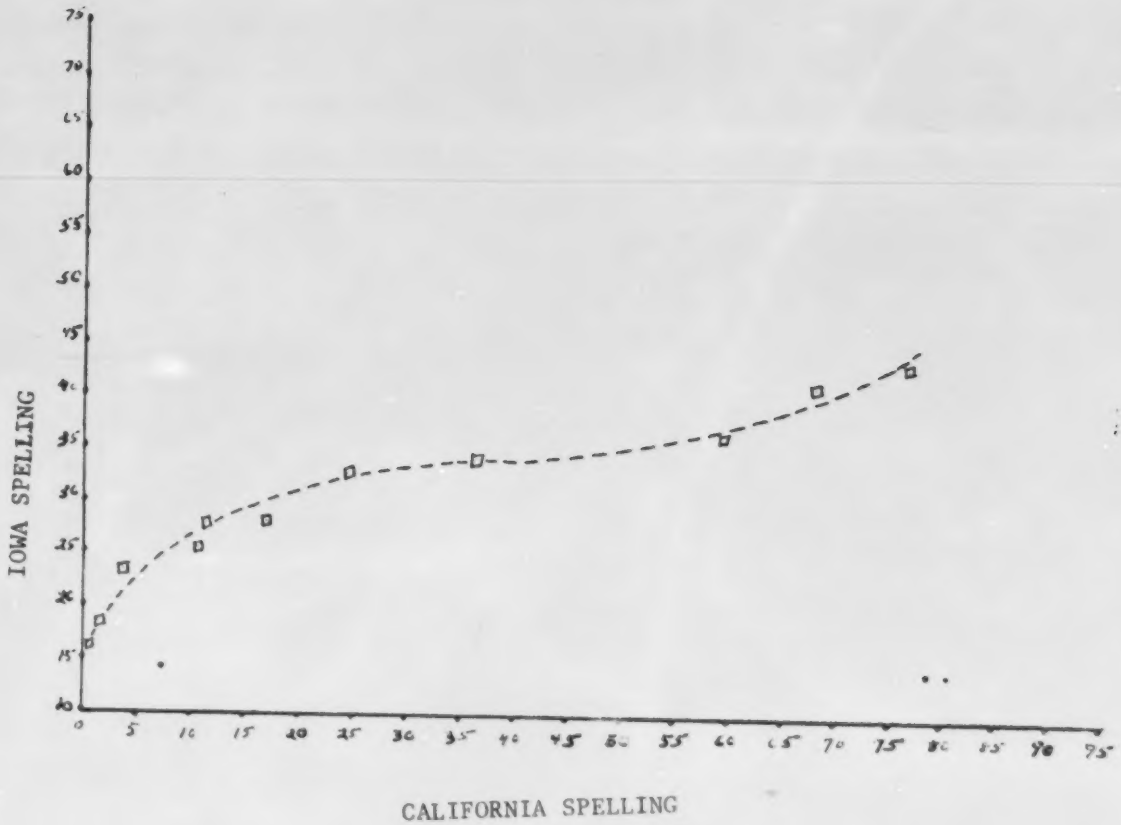

Figure 7.1.6. Conversion of Iowa third-grade Spelling grade-equivalent scores into California Achievement Test Spelling raw scores. Iowa test Level A is converted into California Level 2. Ninety-one students took the Iowa; 87 students took the California.

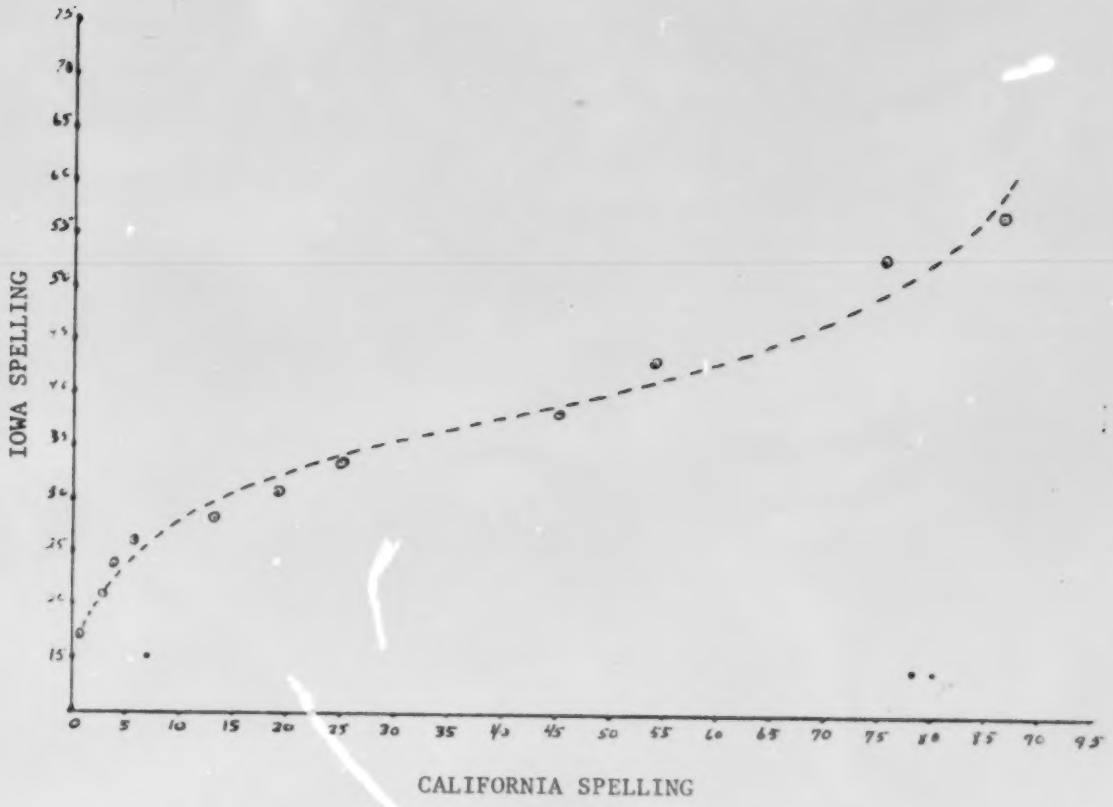

Figure 7.1.7. Conversion of Iowa fourth-grade Spelling grade-equivalent scores into California Spelling raw scores. Iowa test Level B is converted into California test Level 2. Ninety-two students took the Iowa; 87 took the California.

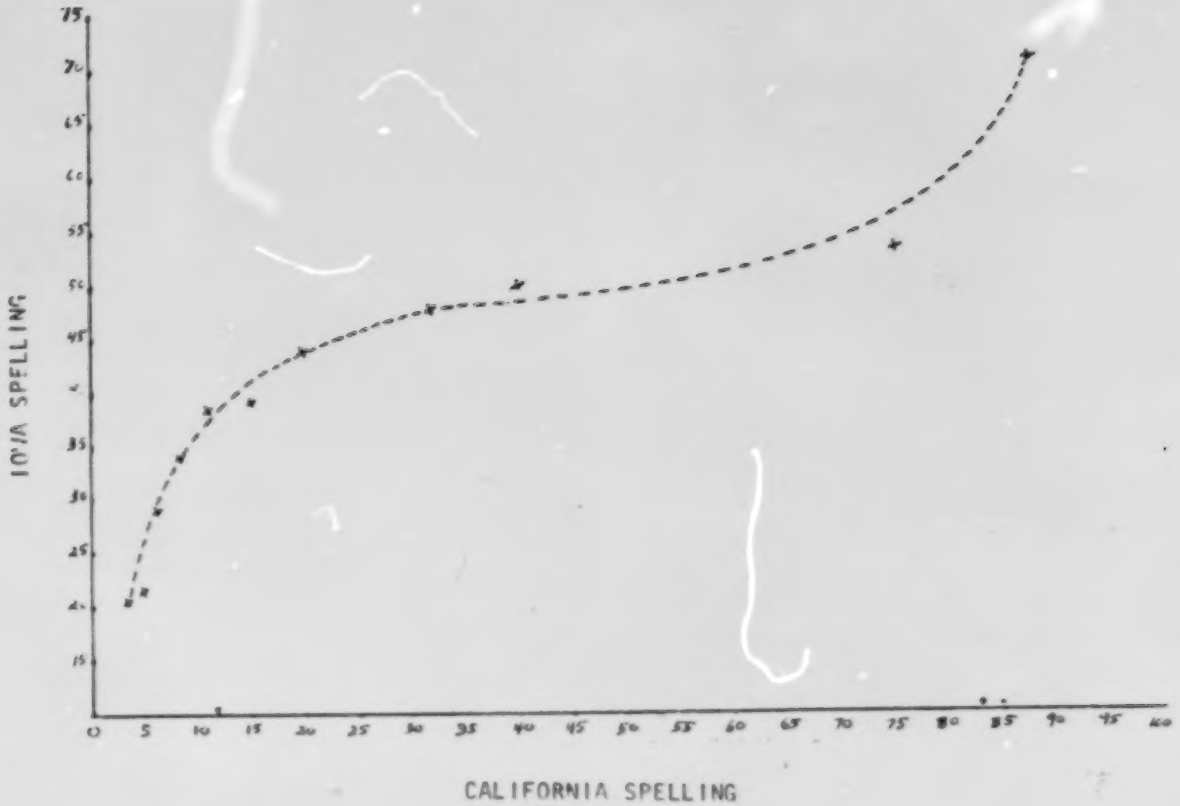

Figure 7.1.8. Conversion of Iowa fifth-grade Spelling grade-equivalent scores into California Achievement Test Spelling raw scores. Iowa test Level C is converted into California test Level 3. Forty-nine students took the Iowa; 39 took the California.

CHAPTER 8. SECOND-LANGUAGE READING PERFORMANCE OF ELEMENTARY STUDENTS

The Let's Be Amigos program goal is to give all its participants basic reading skills in both the mother tongue and the second language. Program staff have recognized that development of reading competence in the second language is dependent upon oral mastery of the students' second language, and is facilitated by reading skill in the students' mother tongue. As a result of this viewpoint, the following program outcomes have been specified:

.Spanish-dominant pupils in the Model School third grade should be performing in English at a level similar to that of English-dominant children at the end of the first grade (i.e., have a grade-equivalent score of approximately 1.8 in May of the third grade).

.Beginning in the fourth grade, Model School Spanish-dominant pupils' growth should be at one year of grade-equivalent score for each grade level. Therefore, fourth-grade pupils should average 3.8 and fifth-grade pupils should average 4.8.

.English-dominant students in the fourth and fifth grades should be reading well enough in Spanish to be tested. However, program staff have not been able to specify clearly the minimum levels of performance which would be acceptable.

.In the ARRIBA components, students being served are recent in-migrants, most of whom did not have continuous educations in the Philadelphia schools. Because of the great heterogeneity of this Spanish-dominant group, no clear-cut test outcomes have been specified. The results of tests were to be provided as an indication of the levels of competence.

In the Model A component, the teaching-team member who is the native speaker of the target language provides second-language reading instruction to the children. In the lowest grade levels the instruction occupied only a short time (10% of the day in PK and K, 15% in first grade, 20% in second). By third grade the entire afternoon session was devoted to learning in the second language. A substantial portion of the instruction was devoted to learning to read the second language, beginning in the third grade (Spanish-dominant pupils) or fourth grade (English-dominant pupils). The Bank Street readers have been used for teaching the reading of English to the Spanish-dominant group. The Laidlaw materials have been used to teach the reading of Spanish to the English-dominant group.

In order to accommodate new students, special small-group second-language instruction was provided for about one hour per day beginning with the second grade. This second-language instruction was provided in small groups and was predominantly oral-aural. After about one year of this oral-aural instruction, pupils were fitted into regular classes at their instructional level.

As the early phases of second-language instruction did not involve reading, only the Model A students who had been in the program for more than a year, and had completed the small-group program and were in regular second-language classes, were given the reading tests.

The Model B component served only Spanish-dominant children. The instructional pattern for second language is parallel to that provided for Spanish-speaking pupils of Model A. The one clear-cut difference was the lack of separate English-second-language classes for new students entering the program above the first grade. In Model B, these newcomers entered the regular classes of the program. The teachers tried to differentiate their instruction within the class to provide the oral-aural training necessary before students began to read English. As there was no clear transition point, the teachers were asked to give the English reading tests to all pupils who had any English reading instruction.

In Ludlow School, the fourth-grade Model B does not fit the typical pattern of the Model School group. The pupils were in a class with many English-dominant pupils. As noted in Chapter 7, with the exception of one hour of Spanish daily, their instruction was all in English.

The ARRIBA component was designed primarily to serve newcomers to the mainland. As a result, the English instruction is heavily oriented toward helping students gain oral-aural competence. However, teachers have reported the teaching of beginning reading in English, especially in the middle and upper grades. The reading instruction in the ARRIBA component is based on the linear material appearing in the ESL work, supplemented by use of reading texts being used with English-dominants in the schools served. As was the case with Model B, all students who had any reading instruction in English were included in the group tested.

Previous Findings

In the third- and fourth-year evaluations, the program had cycled upward through the grades so that it was possible to begin the standardized reading and linear skills testing in the second languages. The results these years (see Offenberg 1972 and 1973) show that Model School Spanish-dominant pupils' performance in English in the third grade was at anticipated levels, but third-grade-to-fourth-grade growth was less than the anticipated "one year grade-equivalent." Performance of English-dominant pupils in the Model A program in Spanish was

exceptionally good (above the norm of third-grade native Spanish-speakers), a result which may have arisen from comple relationships between test content and pupil maturity. This result implies that English speakers tested must have had substantial reading knowledge of Spanish.

In the ARRIBA component, previous testing suggested that pupil competence in reading English was similar to that of native English speakers at the end of first grade regardless of whether the pupils were fourth or fifth graders.

Evaluation Procedure

The fifth-year evaluation of second-language reading and related competences is a partial replication of the study conducted in the fourth-year evaluation. The Spanish-dominant students in third, fourth, fifth grades were tested with instruments designed for assessing the competence of native speakers two years younger than the target group. The English-dominant fourth- and fifth-grade students were examined with an instrument designed for measuring the competence of native Spanish-speaking pupils two to three years younger. The new elements in the evaluation were the result of the upward cycling of the Model School program to the fifth grade.

Spanish-dominant children were examined with four subtests of the Stanford Achievement Test Primary Battery II (Word Meaning, Paragraph Meaning, Spelling, Word Study Skills). This instrument is normed for native English speakers in grades one through three. It has been used to test second-grade native English speakers in the Let's Be Amigos project in the second through fifth funding years (see Chapter 7).

Spanish-dominant children were tested with Prueba de Destrezas Basicas en Lectura, an instrument designed for elementary (first through third grade) native Spanish-speaking students. This test has three subtests (Word and Letter Recognition, Word Meaning, Comprehension). This test has been used regularly for first-language assessment of younger Spanish-dominants in the program. The test's Word and Letter Recognition subsection includes activities which do not require a knowledge of Spanish language to complete. Scores on this subsection were therefore overestimates of Spanish competence of English-dominant children. Other subtests are appropriate for evaluation of the second-language objective.

In Model A, all English-dominant students in the fourth and fifth grades who have been enrolled in the program long enough to be in regular second-language Spanish instruction, and all Spanish-dominant students in the third, fourth and fifth grades who were in regular English-second-language instruction were in the pool of students to be tested. All those actually present on the days of the test administration were examined. The reader should note that among the English-dominant

group, there were some children of Hispanic origin, who had greater exposure to the Spanish language than other English-dominant pupils.

In Model B, all Spanish-dominant students of grades three and four who were present on the testing days and had any experience in reading English were examined.

In ARRIBA all Spanish-dominant students who had any experience in reading English in grades three through five and were present on the days when the instruments were administered, were tested.

All second-language tests were administered after completion of the first-language testing (last week in May or first week of June). In administering these tests, the publishers' instructions were followed explicitly, except that instructions were read two times: first they were read in the target language of the test, then they were repeated in the mother tongue of the pupils. The testing was monitored extensively, with research-staff members observing in the classrooms throughout the testing period.

As there were no clear-cut baselines available with which these test results could be compared, descriptive statistics were computed. In order to begin to assess the impact of the Let's Be Amigos program, multiple regression analysis was used.

Findings

English Performance of Spanish-Dominant Pupils

Table 8.1 shows the overall results of the testing of Spanish-dominant pupils in all components of the program serving students in the third, fourth and fifth grades. In the Model A and B school programs objectives were only partially attained. Objectives stated that pupil performance at the end of third grade would be at a level similar to that of native English-speaking pupils at the end of the first grade. Examination of the grade-equivalent scores of the Stanford Primary Battery II showed that this was clearly the case in Model A, (GE average was 1.9) but not in Model B (GE average was 1.5). In the fourth grade, meeting the objective required that the Stanford score be 2.8 or higher. This was the case in Model B (GE average was 3.0) but not in Model A. In the fifth grade, it was expected that performance would be about 3.8, but the GE obtained in Model A was 2.3 (no fifth grade operated a Model B in 1973-1974).

In the ARRIBA program there was no clear-cut minimum performance level specified. Results of the testing suggest that, regardless of grade level, the average ARRIBA pupil able to read English well enough to take the test was at an end-of-first-grade level regardless of grade.

In order to understand why program performance in Models A and B was often inconsistent with program objectives, and to understand the differences between the levels of performance of pupils in the programs, stepwise regression analysis was computed. This analysis examined the relationship between pupils' characteristics and their performance. The characteristics used were years in program, birthplace, home language (Spanish, English or both) and grade. Separate analysis was made for each subtest of the Stanford--Word Meaning, Paragraph Meaning, Spelling and Word Study Skills. Results show that a meaningful prediction of performance could not be made from the four predictor variables even though statistically significant relationships could be found. The obtained regression models predicted from 9% (Word Meaning) to 12% (Word Study Skills) of the performance variance, with grade and home language having the strongest relationships. In none of the final regression models did length of time in the program emerge as an element with predictive value.

Spanish Performance of English-Dominant Pupils

Fourth- and fifth-grade Model A English-dominant students were tested in their second language--Spanish. The Prueba de Destrezas Basicas en Lectura was used for this purpose. Performance of the English-dominant children is shown in Table 8.2. Each subtest is shown separately, because the knowledge of Spanish necessary to achieve well on each subtest varies. Letter and Word Recognition requires less knowledge of Spanish performance because some sections of it depend primarily upon phonics and knowledge of the letters. As might be anticipated for a group considerably older than the one for which the test was planned, performance on this subtest was very high, with the average in both fourth and fifth grades at the top of the range of competence the test was capable of measuring.

The second and third subtests, Word Meaning and Paragraph Meaning, were dependent upon a knowledge of the Spanish language. The results show performance as high as could reasonably be expected. Comparison with third-grade norms shows that fourth-grade pupils' average score was at the 40th percentile in Word Meaning and the 50th percentile in Paragraph Comprehension. In the fifth grade, performance was at the 50th percentile in Word Meaning and the 66th percentile in Paragraph Comprehension on the third-grade norms. These results suggest that the program's English-dominant fourth-grade group read Spanish nearly as well as third-grade pupils in rural Puerto Rico. The fifth-grade English-dominant group read it as well, or somewhat better than the rural Puerto Rican third-grade norm group.

Regression analysis, parallel to that described for Spanish-dominant pupils, was made in order to understand the factors contributing to the high level of performance in Spanish of English-dominants. As was the case with the former

group, statistically significant patterns emerged, but they explained only small portions of the total variance (15% or less). Both the Word Meaning and the Comprehension scores could best be predicted from grade level. Word Meaning was also dependent on the home-language pattern of the student. Comprehension was predictable from birthplace. Years in the program did not have a contribution to make in prediction of performance beyond that made by grade level.

Evaluator's Comments

Results of this research confirmed conclusions derived from the testing conducted in the previous year in Model A. Both year's data showed that second-language performance of the English-dominant children and the younger Spanish-dominant children in Model A was good--both groups having mastery levels close to, if not greater than, those specified by program planners. However, growth of Model A Spanish-dominant children's second-language performance was clearly slower than that which the objectives suggested. For both ethnic groups, pupil-background variables examined did not contribute meaningfully to understanding the pattern.

This reading-performance information is in marked contrast to that gathered about oral second-language competence (see Chapter 3). Spanish-dominant pupils described in that chapter had much more extensive understanding and oral competence in their second language than did the English-dominant pupils, and demographic characteristics were clearly related to performance.

In Model B, the mixed results (below expectation in the third grade, above expectation in the fourth grade) seemed attributable to the two different organizations of classes. As the reader will recall, the fourth-grade Model B group had English instruction with English-dominant pupils for the major portion of the day. This seems to have enhanced their competence in reading English.

The results of the testing of ARRIBA students, which showed little growth from grade level to grade level, are probably attributable to the port-of-entry nature of the student populations served.

Table 8.1. English Performance of Spanish-Dominant Pupils on Stanford Primar

Group	Word Meaning			Paragraph Meaning			Spelling			Word
	Mean GE	N	SD	Mean GE	N	SD	Mean GE	N	SD	Mean GE
Model A										
3rd Grade	2.1	70	.51	1.9	71	.47	1.8	72	.64	2.0
4th Grade	2.4	54	.83	2.1	54	.77	2.3	58	.11	2.4
5th Grade	2.4	29	.57	2.0	30	.41	2.2	28	.83	2.5
Model B										
3rd Grade(Ludlow)	1.6	24	.34	1.7	21	.28	1.5	19	.31	1.1
4th Grade(Ludlow)	3.0	10	.72	2.5	11	.70	3.2	11	.92	3.2
TARRIBA										
3rd Grade(Waring)	1.8	13	.18	1.8	14	.19	1.7	14	.59	1.6
4th Grade(War&Lud)	2.3	14	.39	1.7	21	.20	1.8	18	.52	1.8
5th Grade(Lud&Swrk)	2.0	21	.59	2.0	24	.62	1.8	26	.87	1.9
All Components										
3rd Grade	1.9	107		1.9	106		1.7	105		1.8
4th Grade	2.4	85		2.1	86		2.3	87		2.4
5th Grade	2.2	50		2.0	54		2.0	54		2.2

English Performance of Spanish-Dominant Pupils on Stanford Primary Battery II

ord Meaning		Paragraph Meaning			Spelling			Word Study Skills			Composite
N	SD	Mean GE	N	SD	Mean GE	N	SD	Mean GE	N	SD	Mean
70	.51	1.9	71	.47	1.8	72	.64	2.0	70	.74	1.9
54	.83	2.1	54	.77	2.3	58	.11	2.4	57	1.17	2.3
29	.57	2.0	30	.41	2.2	28	.83	2.5	29	.84	2.3
24	.34	1.7	21	.28	1.5	19	.31	1.1	15	.18	1.5
10	.72	2.5	11	.70	3.2	11	.92	3.2	11	1.53	3.0
13	.18	1.8	14	.19	1.7	14	.59	1.6	15	.46	1.7
14	.39	1.7	21	.20	1.8	18	.52	1.8	18	.42	1.9
21	.59	2.0	24	.62	1.8	26	.87	1.9	26	.62	1.9
107		1.9	106		1.7	105		1.8	100		1.8
85		2.1	86		2.3	87		2.4	86		2.3
50		2.0	54		2.0	54		2.2	55		2.1

Table 8.2. Performance of English Dominant* Fourth- and Fifth-Grade Pupils on Spanish Reading Test, Test de Destrezas Basicas en Lectura

Item	Letter and Word Recognition	Word Meaning	Paragraph Meaning	Composite
Fourth Grade				
Mean	60.1	13.8	12.5	86.7
Percentile Rank of Mean**	80	40	50	60
Standard Deviation	4.6	6.0	4.6	12.7
No. of Pupils	78	76	83	74.0
Fifth Grade				
Mean	61.8	16.2	15.9	94.7
Percentile Rank of Mean**	90	50	66	70
Standard Deviation	4.9	7.0	5.0	15.0
No. of Pupils	32	32	31	30

* 28 pupils of this group were of Hispanic background but now dominant in English

** Percentile rank is based on rural norms of Puerto Rico, third grade end-of-the-year.

CHAPTER 9. SPANISH READING PERFORMANCE IN THE JUNIOR HIGH SCHOOL ARRIBA PROGRAM

The Junior high school ARRIBA program is designed to preserve and enhance students' competence in their mother tongue. In 1968, before bilingual programs were initiated, all Spanish-dominant pupils in junior-high-school seventh and eighth grades were tested in Spanish (Desing, 1968). The performance of these pre-program junior high school students serves as baseline data against which improvement brought about by ARRIBA could be assessed. It was expected that pupils in the program would show significantly better performance than pupils in the baseline group.

Ninth-grade pupils were not tested before implementation of bilingual education. It was hoped that pupils at this level would be performing at levels with similar percentile equivalents to the levels observed in the seventh and eighth grades--levels above those of the baseline group.

The ARRIBA bilingual program attempted to provide continuous Spanish-language instruction and, thereby, to preserve the students' mother tongue. It was therefore anticipated that pupils who had continuous Spanish instruction would perform better than those who came from a Spanish-speaking area, had one or more years of all-English instruction, and then resumed Spanish instruction when they entered the bilingual program.

The ARRIBA component attempted to improve competence of this Spanish-speaking group through instruction geared to pupils who lack competence in English. These students were primarily new, port-of-entry pupils. Each of the two junior high schools studied in this chapter provided grade-level-appropriate instruction in science, mathematics, and social studies in Spanish. Pupils also receive instruction in Spanish-first-language and English-second-language. With the exception of the English, instruction was provided to groups of seventh-, eighth- and ninth-grade pupils by native Spanish speakers. The development of Spanish reading skills was emphasized in the Spanish-first-language course. Opportunity was provided for reinforcement of these skills in the other subject classes taught in Spanish.

Previous Findings

In the spring of 1968, prior to initiation of bilingual education, citywide testing of Spanish-speaking pupils was conducted (Desing, 1968). In the seventh and eighth grades, the Inter-American Reading Test in Spanish (Level 4 CEs) was used. In the spring of 1972 and 1973, similar testing was conducted in the bilingual program and results were compared with the 1968 baseline. Before the initiation of the bilingual program, the typical reading level was between the 8th

and 9th percentiles on the norms established in Puerto Rico. In contrast, seventh- and eighth-grade pupils averaged around the 25th percentile in 1972. In 1973, the typical seventh-grade pupil scored around the 21st percentile, and the typical eighth grader around the 16th percentile. The drop from 1972 to 1973 was believed to be caused by disruption stemming from two extensive strikes affecting the schools in the 1972-1973 school year.

In both program years, ninth-grade pupils were tested although there was no pre-program baseline with which they could be compared. In 1972, these ninth-grade students were reading at the 9th percentile; in 1973, performance improved to the 30th percentile, despite the strikes.

In 1973, an attempt was also made to see if the level of performance in Spanish could be related to the number of years of English instruction the pupils had between their leaving a Spanish-speaking area and entering the bilingual program. No statistically significant relationship was detected.

Evaluation Procedure

The procedure of this study was a replication of that used in 1972, and was similar to that used to collect the 1968 pre-program baseline.

All pupils present on the testing day in the two junior high schools were tested. A total of 123 pupils of the 189 pupils on roll in the May 1974 update of the Bilingual Program Pupil Information File completed the test.

On each of the designated testing days, the three members of the research staff visited the schools. They observed the teachers administering the tests to the children in their own classrooms. The testing was conducted in the morning in each school, with 10-minute breaks between the subtests. This testing occurred during the first half of May, during the period set aside for citywide testing. No opportunity for makeup tests was available.

All pupils were tested in their regular classrooms. After testing, the pupils in two of the classrooms at the Stoddart-Fleisher Junior High School were interviewed briefly. In this interview pupils indicated how long they had been in schools on the mainland and not in the bilingual program.

The Inter-American Spanish Reading Test (Level 4 CEs) is designed to assess the reading competence of junior high school pupils. It consists of three subtests: Vocabulary, Level of Comprehension and Speed of Comprehension. The Composite score of the test is the total of the raw scores on the subtests.

Analysis of variance was used to compare the performance of seventh- and eighth-grade pupils in the program with those of the pre-program baseline group. Descriptive statistics were calculated for the ninth-grade pupils as no pre-program baseline was available for this group. Correlation coeficients were computed to show the relationship between students' years in all-English programs and the level of performance.

Findings

Seventh and Eighth Grades

As shown in Table 9.1, typical pupils in the ARRIBA seventh and eighth grades perform better than their pre-program counterparts. However, during the 1973-1974 school year, the differences were not as clear-cut as they had been in the past--with the significance level ($p<.07$) in the borderline region.

Ninth Grade

The 45 ninth-grade students average 31.5, with a standard deviation of 15.9. The mean score would put the average ninth-grade pupil at the 14th percentile on Puerto Rican norms. This was somewhat better than the 9th percentile observed in 1971-1972, but not as good as the 20th percentile obtained in 1972-1973.

In the 1972-1973 evaluation, an unsuccessful attempt was made to relate the length of time which pupils had spent in all-English instructional environments to test scores. In this replication a similar attempt was made, but rather than use program records, 25 pupils in two (of the six) classes were interviewed. Results showed that within each class there was a nonsignificant relationship. In the seventh-grade class, the correlation coefficient was -.36 (df=9); in the ninth grade, -.41 (df=12). This latter correlation just missed the .05 level of significance. If these two studies are treated as replications, the two relationships may be combined using weighted averages of the Fisher z'. When this is calculated, $z' = -.41$, equivalent to a correlation of -.39. The standard deviation of z' (when there is a total of 25 cases) is .21. This indicates that overall the correlation of the combined experiment would be significant ($p<.03$). This result shows that if the two grade levels are combined, there is a significant loss of competence for years the student spent in all-English instruction.

Evaluator's Comments

The data appearing in this study show that program pupils are performing better than the baseline group. However, they suggest that there has been a reduction in the magnitude of the difference between pre-program baseline groups and pupils in the Let's Be Amigos program. This reduction indicates that increased

attention to reading instruction at the junior high school level may be warranted. Some attempt at analyzing whether there has been a change in the pupil population being served is also warranted. The existence of Model School and lower-grade-level ARRIBA programs may be bringing about these population changes as pupils who have been in bilingual programs in elementary grades may be more likely to be in the regular English-language instruction at the school.

In contrast to previous years, the study of relationships between years of English instruction and pupils' performance indicates that Spanish-language competence is reduced by students' attendance at a school in an all-English instructional environment for one or more years after coming to the mainland. This suggests that the discrepancy between ARRIBA pupils and norm groups in Puerto Rico may, in part, be caused by the ARRIBA students' studying in all-English programs.

Table 9.1. Performance of ARRIBA Students on Inter-America Reading Test: Comparison of Seventh- and Eighth-Grade Students with Pre-Program Baselines

Item	Pre-Program	ARRIBA
SEVENTH GRADE		
Mean Raw Score	20.1	23.6
Percentile Rank of Mean*	9	18
S.D.	12.3	10.4
N	98	42
EIGHTH GRADE		
Mean	24.1	27.2
Percentile Rank of Mean	8	14
S.D.	14.8	13.2
N	82	36

Analysis of Variance of Raw Scores

Source	MS	df	F	p<
Grade	951.7	1	5.6	.01
Program	584.1	1	3.4	.07
Grade & Program	20	1	0.0	NS
Within Cells	169.8	254		

*Norms for Puerto Rico public schools, Table 47, page 53 of the Manual of Tests, Guidance Testing Associates, Austin, 1967.

CHAPTER 10. PARTICIPATION IN THE ARRIBA PROGRAM IN TENTH GRADE AND GRADUATION PREVALENCE IN TWELFTH GRADE

One major objective of the ARRIBA component was to reduce dropout incidence of pupils in its high school level. Thus, the evaluation was designed to answer the question, "Are Hispanic students who participate in the ARRIBA program in the tenth grade more likely to graduate three years later than those who do not participate in the tenth grade?"

The ARRIBA high school program has remained basically unchanged over the three years during which the students examined in this study were in school. Course work was offered in ESL (English as a second language), SFL (Spanish as a first language), science (including biology and chemistry), social studies and mathematics (including algebra and geometry) in Spanish. In addition to the regular program, Kensington High School has also offered, over the last four years, course work in commercial subjects in Spanish. Where appropriate, courses have emphasized Hispanic and Latin American content. The Spanish-dominant students of the four high schools can select one or more of the courses offered on the advice of their counselors. The SFL course work is taught by teachers who are native Spanish speakers, while the ESL classes are taught by teachers who have fluency in Spanish. This eliminates, to a large extent, misunderstandings arising from language problems.

Previous Findings

The main reason for computing dropout rates was to show whether the ARRIBA program has increased the probability that a student would graduate from school. If it were known that a student had graduated, it would also be known that he did not drop out during vacation intervals or during the years before graduation which followed his participation in the program.

The 1971-1972 and 1972-1973 evaluation reports (Offenberg, 1972, 1973) showed that the ARRIBA program was effective in preventing students from dropping out during the school year. In these years, the percentage of program participants dropping out between October and March was computed. The results of these computations were compared with parallel data for Spanish-dominant students attending the four high schools in the year before the program was initiated (1968-1969). Results were very similar for each of the two years assessed in this way--both showing dropout-rate reductions. For example, the pre-program dropout incidence was reduced from 25.1% to 8.5% in the tenth grade and from 22.7% to 9.5% in the eleventh grade. The pattern in these results suggested that the program was effective in eliminating most tenth- and eleventh-grade dropouts during the time when school was in session for students who were enrolled in ARRIBA program.

Since 1970, a student-by-student record has been kept for program participants. This record permitted the project to assess the effect of participation in the ARRIBA program during tenth grade on the actual proportion of students who graduated from school in the current year.

Last year a longitudinal study of this type was carried out. Spanish-dominant 10th-grade students in the ARRIBA program in December 1970 were compared with Spanish-origin students in the same school but not in the program and with Spanish-origin students citywide. The results of the study confirmed previous findings. Students enrolled in the bilingual program were completing school at a higher rate than similar students in regular classes. The ratio of program students who graduated to nonprogram students in the same school who graduated was 3:1. The ratio of program graduates to citywide nonprogram graduates was 2:1. The large difference between ARRIBA and non-ARRIBA students in the four high schools served by the program suggested that there was a problem of assigning all students who need bilingual education to the program. It appeared that fewer students were perceived by their English-speaking counselors as needing bilingual classrooms than actually needed such classrooms. This caused the very high dropout rate among the non-ARRIBA group.

Evaluation Procedure

The current evaluation was conducted to determine whether students who had participated in the program in the 10th grade three years earlier have continued to show a greater tendency to graduate than those who remained out of the program in the tenth grade.

The subjects of this study consisted of all students listed in the computerized citywide pupil directory as Spanish-speaking and in the 10th grade in December 1971. According to the School District's Division of Administrative and Survey Research, if the dominant language in the pupil's home is Spanish, the pupil's name should appear in the file of Spanish speakers.

The 104 students who appeared in both the project file and the Administrative and Survey Research file constituted the group of subjects in the "program group." All students not listed in the Let's Be Amigos pupil-information file were treated as controls. The current pupil directory was used to identify any students who had changed schools due to moving. Graduation lists were then checked to determine whether each student had graduated in the spring of 1974.

The percentage of students graduating was computed for each group, and chi-squares were computed to determine the statistical significance of the differences observed.

Findings

Table 10.1 compares the graduation rate of Spanish-dominant students who were in the program's 10th grade in 1971 with that of similar nonprogram students in the same schools. Differences between the baseline and the program were statistically significant. Program students were more likely to graduate than other Spanish-dominant students in the same schools.

Table 10.2 compares the graduation rate of Spanish-dominant students who were in the 10th-grade ARRIBA program in 1971 with that of Spanish-dominant students on a citywide basis. Although there was no statistically significant difference, there was a trend in favor of the program.

Evaluator's Comments

Results of this study show that participation in the 10th-grade level of the ARRIBA program continues to be effective in increasing the proportion of Spanish-dominant students who complete their education, as compared with regular programs offered by their schools. However, for the first time the graduation rate was not clearly better than that obtained for Spanish-dominant students citywide.

Comparison of the results obtained in the fourth-year evaluation with those of the current year shows that the proportion of Spanish-dominant students graduating in the city as a whole rose from 20.9% to 25.5%, while the proportion graduating from the ARRIBA program fell from 37.3% to 28.8%. These changes account for the lack of clear-cut difference between the program and citywide rates. In the "same school" comparison a similar change in the baseline was noted, with the graduation rate of pupils not served rising from 10.7% to 19.7%. It seems that these changes in the baseline and program rates may reflect differences in the student body being served. With maturation of the program, there are now pupils graduating who may have been program participants in junior high school and thus are not as likely to need the bilingual program in high school. This phenomenon would increase the graduation rate within the baseline group. A second result of this process would be to change the character of the group choosing to participate in the ARRIBA program.

In order to understand the nature of these phenomena, it appears that a more sophistocated evaluation design will be needed in subsequent years. Designs based on cohorts in which the formation of program and baseline groups is based on program participation at any grade level is one approach that might be valuable.

Table 10.1. Graduation Rate of Spanish-Dominant Students Who Were in Grade 10 in December 1971

Group	Graduated		Not Graduated		Total	
	N	%	N	%	N	%
In ARRIBA	30	(28.8)	74	(71.2)	104	(100)
Not in ARRIBA (same schools)	52	(19.7)	212	(80.3)	264	(100)

Chi-square = 3.1 df = 1 p .05

Table 10.2. Graduation Rate of Spanish-Dominant Students in Grade 10 in December 1971

Group	Graduated		Not Graduated		Total	
	N	%	N	%	N	%
In ARRIBA	30	(28.8)	74	(71.2)	104	(100)
Not in ARRIBA (citywide)	115	(25.5)	336	(74.5)	451	(100)

Chi-square = 0.3 df = 1 N.S.

CHAPTER 11. STATUS REPORT: EVALUATING ENGLISH-SECOND-LANGUAGE COMPETENCE IN ARRIBA

One of the most persistent problems in the development, management and evaluation of the ARRIBA component of the Let's Be Amigos program has been meaningful assessment of English competence of the port-of-entry students it serves. The program-evaluation activities described in this chapter had, as their objective, the development or selection of an instrument capable of assessing the development of this second-language English competence in order that valid diagnosis of pupil needs and clear assessment of the impact of educational strategies will be possible.

In the 1973-1974 school year, exploration of a variety of approaches was undertaken. The exploration was a joint one, between instructional personnel and evaluation personnel of the English as a Second Language and the Let's Be Amigos projects. A committee of teachers who work with English instruction in both programs, the director and supervisory staff of both programs, and the two research groups met and explored the problem.

The committee took two distinct approaches. One was to begin to develop a criterion test which would reflect the content of English as a Second Language as it was being taught in Philadelphia. This criterion test is to be a device for determining when a student has the competence necessary to participate in regular, mainstream English instruction. The second task was to explore some existing instruments which might assess these competencies, in order to see if they were useful in themselves, or if they demonstrated useful strategies for evaluation of the competencies taught in the program.

Previous Findings

In the spring of 1972 (see Offenberg et al., 1973a) an attempt was made to assess the English reading competence of ARRIBA junior high school students. Various levels of the Iowa Tests of Basic Skills (4th grade, 6th grade, and 7th grade) were tried. Results showed that all pupil groups were at the guessing level regardless of the level of the test. This indicated that Iowa test levels which were tried were not suitable for measuring English competencies of the ARRIBA junior high school group.

Evaluation Procedures and Results

The second-language English evaluation information provided here contrasts with that provided in other chapters because it is not an assessment but rather a status report. During the 1973-1974 school year two strategies were undertaken,

building a new instrument and experimenting with some potentially useful devices. Both the test construction and the instrument tryouts were conducted jointly by the Title I ESL evaluation team and the evaluators of the Let's Be Amigos program.

Construction of ESL Tests. One approach to developing an adequate evaluation of English competence was the beginning construction of a special, criterion test of English comprehension and usage. In this development, the first phase was to compare and contrast the four text series used in reading ESL: English Your Second Language, Core English, Lancaster and Lado. Two tables were made, one focusing on linguistic structures, the other on vocabulary. The items in both tables were identified as to the point at which they should be introduced in instruction. The range was from items which were so basic as to require immediate introduction to those which were so complex that only the most skilled students would encounter them within a two-year ESL instruction framework. All items on both lists were skills and knowledges which students ought to be able to comprehend and recognize when presented orally--none required reading or writing.

After examination of their lists, the ESL specialist group designed a pool of about 200 multiple-choice items, capable of being presented orally, which reflected the range of competencies which students mastering the ESL program content ought to be able to complete. During the 1974-1975 school year, it is anticipated that a test (or tests) of English suitable for students in Grades 4-12 will be constructed from the initial item pool. This test will be validated by exploring its relationship to teacher judgment of competence, experience in English as a Second Language and length of residence on the United States mainland. If this process is completed successfully in 1974-1975, study will be undertaken in the following year to assess the degree to which competence on the test will predice competence in the English-language mainstream. This study will attempt to predict success in the various grade levels of the English environment of the low-socioeconomic-status schools the children attend. Successful completion of this second process will permit the program personnel to make rational decisions regarding movement of students out of ESL (or out of the ARRIBA program) and into the mainstream of their schools.

Exploration of Existing Instruments. The teacher at Penn Treaty Junior High School agreed to experiment by using two instruments to assess English competence--the Boehm Test of Basic Concepts and two subtests of the Stanford Diagnostic Reading Test Level I. The teacher was asked to select the five to seven pupils who were the most competent, and five to seven pupils who knew the least English in her classes. (The Boehm test was also used in pupils' mother tongues in evaluation of Model A kindergartens.) The instrument, administered in English, tested whether the student understood important concepts (e.g., "Wildest," "Between," "Third," "Zero") when presented in that language. The

Stanford subtests administered were Reading Comprehension, which measures the students' comprehension of paragraphs, and Vocabulary, which uses sentence completion to measure vocabulary mastery. In the Vocabulary test both the sentences and answers are read aloud to the students. Statistics (t) were computed to see if the tests were capable of discriminating the English-competent students from those who still needed extensive English instruction.

Table 11.1 shows the outcome of this exploratory study as conducted in the Let's Be Amigos ARRIBA component. All three tests were capable of discriminating the student groups. However, comparison of the competent students' and beginners' scores shows that on two of the tests, Vocabulary and Boehm, the groups differed by only five raw-score points. This suggests that there may be problems in using these tests to determine the competence of individuals, even though they would be satisfactory for assessing differences in pupil groups. This problem does not appear to exist for the Reading Comprehension test; that test may be useful for assessing English competence in the junior high school ESL component of ARRIBA.

The ESL evaluation team confirmed the conclusion reached in the ARRIBA component in their use of the tests in a wider variety of grade levels from upper elementary through high school. Regardless of grade, the Stanford Reading Comprehension subtest seemed to be a viable evaluation tool, as pupils who had studied ESL longer performed better on it than beginning students. Data describing the ESL evaluation teams' observations in greater detail will appear in Evaluation of Title I ESEA Projects, 1973-1974: Technical Reports, to be published by the School District's Office of Research and Evaluation.

Evaluator's Comments

The review of the development of a specialized ESL evaluation instrument suggests that within a year, it should be possible to develop and test a criterion-referent ESL instrument. In the interim, the Reading Comprehension subtest of the Stanford Diagnostic Reading Test Level I appears to be a viable measure for assessing reading in those grade levels in which reading is a part of the ESL component of ARRIBA.

Table 11.1. Comparison of Junior High School English Competents and English Beginners on Three Potential Tests of English Competence (Raw Schores)

Group	Stanford Diagnostic Reading Test (Level 1)				Boehm Test	
	Comprehension		Vocabulary			
	N	X	N	X	N	X
English Competents	7	35.8	7	18.5	7	48.1
English Beginners	5	23.5	5	13.0	5	43.0
t	2.7		1.9		3.8	
p (one tail)	$<.05$		$<.05$		$<.05$	

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